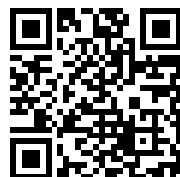


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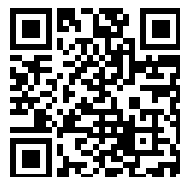


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TRANSACTIONS

OF THE

AMERICAN

PHILOLOGICAL ASSOCIATION.

1878.



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# CONTENTS.

I. Contributions to the History of the Articular Infinitive.	
By Professor B. L. GILDERSLEEVE.	5
II. The Yoruban Language.	
By Professor C. H. TOY.	19
III. Influence of Accent in Latin Dactylic Hexameters.	
By Professor M. W. HUMPHREYS.	39
IV. Observations on Plato's Cratylus.	
By JULIUS SACHS, PH.D.	59
V. On the Composition of the Cynageticus of Xenophon.	
By Professor T. D. SEYMOUR.	69
VI. Elision, especially in Greek.	
By Professor M. W. HUMPHREYS.	84

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I.—*Contributions to the History of the Articular Infinitive.*

BY BASIL L. GILDERSLEEVE,

PROFESSOR OF GREEK IN THE JOHNS HOPKINS UNIVERSITY.

In examining, with some advanced students, the current statements that Thucydides was a pupil of Antiphon (see Blass, *Geschichte der Attischen Beredsamkeit*, i. 85), and that Demosthenes was an admirer, and to some extent, an imitator of Thucydides, I marked out some grammatical and stylistic categories which I thought worthy of special observation; and among these the use of the articular infinitive, partly because the history of the combination had interested me for several years, partly because I thought I had noticed that there was a certain coincidence, both in special handling and in proportionate employment. From the examination of these authors I proceeded to look into the usage of the other orators, and thence to the closer study of the general question involved. My treatment has not been exhaustive, and hence I dare not formulate with confidence. My examination has been limited to Pindar and the dramatic poets, Herodotus, Thucydides, and the Attic orators, except Hypereides, and I only undertake to register progress for the sake of those who

may be richer in leisure, or more accurate in method ; and the modest title of contributions must be my cover against the charge of rash generalization.

I have no new theory of the infinitive to advance, nor shall I venture on the comparative side of the study, although I know that in the present drift of research it will be hard to gain consideration for any view which does not take in a large group of languages. Yet I am convinced that in this investigation the only safe course is to follow the special development of Greek, and in support of this conviction, I would offer a few preliminary remarks.

After considerable debate the form of the Greek infinitive seems to be regarded by most of those who are qualified to discuss the question as a dative abstract, although Curtius has still something to say in behalf of a locative element, as Westphal had done before him. Now it matters very little, so far as this investigation is concerned, whether the case-form was dative or locative, or a blending of both, or whether the infinitive forms in the kindred languages are perfectly parallel with the Greek infinitive or not. The use of the article with the infinitive completes the deorganization of the infinitive—deorganized before, it is true, yet, so to speak, not confessedly deorganized. By assuming the article, the Greek infinitive, though comparatively late, sunders its inflexional connection with the substantive by a formal act, and bases its claim to the character of a substantive on a foreign element. That this divorce between the infinitive and its form did not take place without a certain struggle, that there was a dim half-consciousness, is shown, I think, at more than one point, and a striking analogy to the uneasy conscience of the Greek appears in our English handling of the verbal in *-ing*. The very attempt to attach the article gave a little shock to the sense of language, and it is not until we reach the Attic time that there is any freedom, any license in the use. It is true, as I have said, that the infinitive was deorganized before; that it had become what some scholars have rather unhappily called an adverb before. But the article is confession, and that is a long stride, and one in which the other Indo-European

languages have not kept pace with the Greek. Add the article, and the next step is the use of the preposition with the article; and for a time this must have been to the Greek a strange thing. He had taken liberties with the infinitive before—he had construed it directly with *πρίν*, which, theoretically, would require the genitive or *ἤ*, and there are traces of an early attempt to combine *ἀντί* directly with the infinitive; but with this additional innovation the sense of form revived, as it were, and the prepositions seem to have worked their way into use by degrees. Compare with this phenomenon the limited use of prepositions with gerund and gerundive in Latin. Thucydides, it is true, lets them in as a flood; but Thucydides is abnormal here as elsewhere. With the use of article and infinitive, the Greek language paused. There was no further mechanical handling of the infinitive. The article might take a demonstrative besides, as in ARISTOPH. Vesp., 89: *ἐρᾷ τε τούτου τοῦ δικάζειν*, but in classic Greek there is no parallel for certain Latin constructions, such as are usually set down as Hellenisms. See my remarks on Persius, 1, 9. In such Greek as that of Ignatius, we are not surprised to find (Ep. ad Eph. 3): *τὸ ἀδιάκριτον ἡμῶν ζῆν*; 11: *τὸ ἀληθινὸν ζῆν*; ad Magn. 1: *τοῦ διαπαντός ἡμῶν ζῆν*; 5: *τὸ ζῆν αὐτοῦ*, all vulgarisms or Latinisms. It would, then, be perfectly justifiable to begin this study on purely Hellenic soil, with the articular infinitive as essentially an Hellenic product, and yet it may be worth while to go a little further back and see how far the infinitive was deorganized before it was thus stamped as a fossil.

A language retains its habits long after it has lost its conscience. So in phrases and formulæ the Greek infinitive may be regarded as having retained its dative, or, as some would say, its locative sense throughout the whole history of the language. So the complementary infinitive, the *θαῦμα ἰδεῖσθαι* of Homer, the *θαῦμα ἀκοῦσαι* of Pindar, the *ἄξιον θαυμάσαι* of Thucydides, and all the so-called "loose" infinitives belong to this earlier category. So the occasional use of the infinitive after verbs involving motion is a remnant of the older time and perfectly consistent with the function of the pure dative in cognate languages, nay, in Greek itself. With a verb of

motion, the dative represents the personal object *for* which rather than the object *to* which, and as the strictly personal character of the dative was effaced in the subsequent *contaminatio*, it is not surprising that this construction becomes less and less common. Still, such verbs as *πέμπειν*, *ἀποστέλλειν*, *διδόναι*, are found at all stages with the infinitive. But not to consider classes in detail, the great mass of verbs that take the infinitive as an object, may be summarily comprehended under the title of Verbs of Creation, by which I mean verbs whose office it is to bring about a result. And here it is well worth notice how the original dative (for which) and the accusative of the inner object meet—how the object for which, and the object to be effected coincide. The chief of these verbs of creation are verbs of will and endeavor—call them verbs of asking, persuading, teaching, exhorting, or what not. They all convey the notion of effort to an end, of will, of purpose. Of will, of purpose, I repeat, not tendency, because the primitive conception knows nothing of tendency in the modern impersonal sense.

To these combinations the dative notion may not have been foreign. So in English, when by dint of frequent use the *to* had become a mere “sign,” there was added, in order to bring out the final sense, a “for,” which was dropped when the conscience had become seared. But while I have just shown how dative and accusative might meet as to sense, the question recurs: What was the infinitive to the Greek himself? If anything definite, an accusative, it would seem. If Homer says: *βούλετο νίκην* H 321, M 347, was that other to him than *ἐβούλετο νικᾶν*. In AR. Eccl. 307 foll.: *ἀλλ' ἦκεν ἕκαστος ἐν ἄσκιδιφ φέρων | πιεῖν ἄμα τ' ἄρτον αὖ | ὃν καὶ δύο κρομμύω | καὶ τρεῖς ἄν ἐλάας*, the infinitive “drink” is parallel with a loaf of bread, two onions, and three olives—and so we can hardly recognize a shifting of cases in Philom., frag. 167: *αἰτῶ δ' ὑγίειαν πρῶτον, εἴτ' εὐπραξίαν, | τρίτον δὲ χαίρειν, εἴτ' ὀφείλειν μηδενί*.

The use of the infinitive as an object, and as an accusative object, led in time to its use as a subject. It became to the Greek an accusative neuter. Now the neuter has no nominative, because the nominative implies a sentient agent, or one



so conceived, but the Greek language was not at the pains of developing a special form for this occasional use of the neuter, and in its capacity as an accusative neuter the infinitive was treated as a nominative, despite its dative form. This use of the infinitive as a nominative may be considered the final effacement of the infinitive as a dative from the consciousness.

Having now followed the infinitive to the perishing of its case-form, we must next examine the shifting of its temporal relations, and this carries us to the consideration of the use of the infinitive in *oratio obliqua*, a difficult subject, but one which cannot be avoided in treating of the articular infinitive.

As an abstract noun we should expect the infinitive to have but three tenses—present, aorist, and perfect, say ποιεῖν, ποιῆσαι, πεποιηκέναι. The future infinitive, although formed from the beginning of our record, seems to have been as much due to the necessities of *oratio obliqua* as the future optative, which is post-Homeric.

The three forms of *oratio obliqua* develop in the following order: First, the infinitive form, secondly, the optative form—which is chiefly post-Homeric, the optative for the indicative in Homer being restricted to a narrow class—the interrogative—and thirdly, ὥς with the participle.

The verb which controls the *oratio obliqua* clauses is a verb of saying or thinking—which in the first two forms is almost always expressed; the third form corresponding largely to “partial obliquity” in Latin.

This *oratio obliqua* construction, in which the infinitive no longer represents the stage of the action, the kind of time, but the relation of the action to the present, the sphere of time, seems to have arisen gradually from the other class—the verbs of creation—the verbs of will and endeavor. The connecting link remains, and consists of the verbs of swearing and witnessing, hoping and promising, verbs in which the will is the deed. Two indications of this survive in the normal language. The negative of the infinitive after these verbs is with reasonable regularity μή, and the tenses follow largely the older scheme—so that the aorist is used for the future—

especially with verbs of promising in which ambiguity is impossible.

The deflection of the verbs of saying and thinking from the verbs of asseveration and the like seems to be due to the image of *oratio recta* before the mind of the speaker. Hence the negative is *οὐ*, and the future infinitive represents the future indicative. And here it is important to notice for the difference between Greek and Latin the closeness with which *oratio obliqua* follows *oratio recta* in the one, the looseness in the other. In Latin there is often no *oratio recta* present to the mind, but the Greek is far more plastic, far less tolerant of *oratio obliqua* than the Roman, and it is interesting to watch how he feels his way to new combinations. So in HOMER II. 9, 684 ἄν with the infinitive, which you can find anywhere in prose Greek, is timidly used with direct reference to an existing ἄν with the optative (v. 417).

As to the much debated accusative and infinitive, I will simply say that by frequent use it formed a kind of abstract compound, such as we find in the Latin gerundive, and to some extent in the Greek participle, and so was employed as a totality in various combinations and even as a subject. Curtius's explanation by a kind of *prolepsis* and confusion of two constructions is to my mind utterly unsatisfactory. But not to dwell on these points, let us hasten to the real matter at issue. If the *oratio obliqua* infinitive is older than the articular infinitive—as we all know—how can the articular infinitive be limited to the category of the pure abstract noun? Of course this is its ordinary function, and scores of passages may be cited to show that the infinitive and the abstract were considered parallels by the Greeks themselves, and I shall have occasion to revert to this fact myself. If Thucydides says (2, 87, 3) τὸ τότε τυχεῖν, that does not prove that τυχεῖν has a real aoristic past time, for Demosthenes (37, 43) says just as readily τὸν δόρυβον τὸν τότε. Besides, the negative μή which marks the difference between the infinitive proper and the *oratio obliqua* infinitive shows that the articular infinitive remains essentially an abstract. But inasmuch as (1) the article may be prefixed to those forms of the infinitive which

are due to *oratio obliqua* alone, notably the future infinitive and the infinitive with *ἄν*, inasmuch as (2) the tense of the infinitive is often suggested by the indicative context, inasmuch as (3) the general sense of a verb of saying or thinking often seems inseparable from the complex, it is not going too far to say that the articular infinitive may be used now as a pure abstract, now as an abstract form of *oratio obliqua*. That it is often used as substantivizing the imperative use of the infinitive is also worth notice.

But it may seem hardly worth while to linger on so minute a point as this difference between an abstract noun and the abstract expression of an *oratio obliqua* relation, and I now proceed to consider some chapters from the history of the articular infinitive.

HOMER: There is no articular infinitive in Homer; but the *nīsus* is there as in *Od.* 20, 52: ἀνὴρ καὶ τὸ φυλάσσειν πάννυχον ἐγρήσσοντα: and assuredly in an Attic writer we should have no difficulty in recognizing the articular infinitive here, especially as there is a marked tendency to use the articular infinitive of disagreeable things. But we must interpret with Nägelsbach: "It is another nuisance, this thing, keeping guard all night awake." Compare the familiar use of the preparatory τοῦτο.

In PINDAR, in whom the articular infinitive occurs for the first time, to any extent, the use is restricted. According to Erdmann *De Pindari usu syntactico*, p. 75, there are but ten examples; all of these, except one, in the nominative, and that one in the accusative. Noteworthy is the position of the articular infinitive, which in all the passages cited, except *Ol.* 8, 60,—and that to be explained by chiasm,—is put at the beginning as an object of thought, a real accusative, after all. The aorist preponderates largely; seven times out of ten. The rest are presents. There is but one instance of articular accusative and infinitive.

THE DRAMATIC POETS: The next group that I have inspected is that of the dramatic poets. Aeschylus, Sophocles, Euripides, and Aristophanes. The statistics for the first two have been furnished by Dindorf and Ellendt, respectively. Mr.



J. H. Wheeler, late Fellow of the Johns Hopkins University, has collected the instances of the articular infinitive in Euripides, and I have read Aristophanes myself to that end, my results being compared with those of Dr. E. G. Sihler, who read the same author, independently, for the purpose. While there may have been some oversight in detail, the general result can hardly be wrong.

AESCHYLUS uses the articular infinitive within modest limits; chiefly in the nominative and the accusative—the latter largely in the stereotyped combination τὸ μὴ (τὸ μὴ οὐ) after verbs and phrases of negative result. There is, I believe, but one example of the articular accusative and infinitive as the subject of a sentence, whereas the accusative occurs repeatedly with τὸ μὴ, which I consider a hint as to the way in which the construction spread. The preposition is used sparingly; in fact, only three times, and in one of these the reading is doubtful. The tenses of the articular infinitive in Aeschylus are the present and aorist. There seems to be no trace of substantivized *oratio obliqua*.

Aeschylus then is conservative, but less conservative than Pindar.

In SOPHOCLES the vast mass consists of nominatives and accusatives; there are very few genitives and datives, not more in proportion than in Aeschylus. There is a considerable increase in the percentage of use—say one occurrence in one hundred and twenty verses, whereas we find in Aeschylus one occurrence in one hundred and fifty-nine, but the handling is essentially the same. So prepositions are used sparingly (πρός, ἐν, εἰς). The tenses are all present or aorist, except such perfects as εἰδέναι (Antig. 263), which does not count, and πεφευγέναι (v. 437), which hardly counts. Remarkable is the substantivized *oratio obliqua*, Antig. 235. 6.

τῆς ἐλπίδος γὰρ ἔρχομαι δεδραγμένος  
τὸ μὴ παθεῖν ἂν ἄλλο πλὴν τὸ μόρσιμον.

Here in the mouth of the watchman the article may be considered deictic, and the twist in the expression may be excused. The articular accusative and infinitive subject occurs Phil. 963.

ἄνθρωποι

In EURIPIDES there would seem to be a marked falling off. According to Mr. Wheeler's count there are not so many articular infinitives in all Euripides as in Sophocles; and the bulk of Euripides is two and a-half times as great. The occurrences number but one in three hundred and twenty verses. It would be rash to account for this by the closer approach of Euripides to every-day speech, as I did two years since in the matter of *ἴάν* with the subjunctive. Still it is worth noticing. Over forty per cent. of the whole number are nominatives, but the genitives bulk much more largely than in the others. Prepositions (*εἰς*, *διά*) and quasi-prepositions (*πάρῳ*, *ἔνεκα*, *ἔξω*) are sparingly used. The tenses are present and aorist, counting *εἰδίδω* as a practical present. The articular accusative and infinitive, as a subject, is rare, but not so rare as in Aeschylus and Sophocles; and, on the whole, there is somewhat greater freedom in the handling of the construction, but it would seem as if it had not become pliant enough for the poet's purpose—who is *ὕψος*, if anything. The largest number of articular infinitives occur in the *Iphigenia at Aulis*,—by some considered his latest piece,—but this is not to be urged.

Theory would require that ARISTOPHANES should not use the articular infinitive so much as the tragic poets; and the theorist who should begin his search with the Acharnians would be gratified to find none in that play. But an examination of the other plays will not bear out this theory. Aristophanes does use the articular infinitive less frequently than Aeschylus and Sophocles,—once in two hundred and fifty-eight verses,—but still much oftener than Euripides. The bulk consists of nominatives and accusatives. Prepositions are not very common (*ἀπό*, *διά*, *έν*, *περί*, *ὑπό*), nor are the quasi-prepositions (*ἔνεκα*, *πλήν*). The tenses are all present and aorist, *εἰωθέναι* being a practical present. A large proportion of the articular infinitives in Aristophanes are purely deictic, or anaphoric; yet another class is exclamatory, both of these belonging to what may be called the popular side of the construction; and a considerable number are parodic. So the cluster in *Ran.* 1477. 8: *τὸ ζῆν μὲν ἔστι κατθανεῖν, τὸ πνεῖν δὲ*

δειπνεῖν τὸ δὲ καθεύδειν κώδιον: and other gnomic passages bear the same imprint. The variations in the different plays may be of some interest. The *Acharnians*, as I said, contains none; the *Peace* but one, the *Lysistrata* but two. In the *Clouds* they congregate in the latter part, as might be supposed. In the *Plutus* there are more in proportion than in any other comedy; a fact which may or may not be significant.

I now turn to prose. And first to the HISTORIANS; and first of the historians, Herodotus. HERODOTUS uses the articular infinitive very rarely in comparison with Thucydides, who was the first writer to appreciate its possibilities. According to the count of Mr. Allinson, Fellow of the Johns Hopkins University, Herodotus uses it only thirty-two times; eight times (probably) in the nominative, six times in the genitive (three of these without manuscript authority, according to Abicht), eighteen times in the accusative (largely negative). The tenses used are present and aorist; the perfect being used of resulting condition, 4, 6: τὸ ἐστὶχθαί. The prepositions are ἀντί, μετά, and ἐκ. In three passages, 1, 210; 6, 32; 7, 70, the manuscripts construe ἀντί directly with the infinitive; a phenomenon which I have found again in later Greek. The greater part of the examples occur in the latter part of the work.

A remarkable contrast is presented by THUCYDIDES. For his usage I have depended on Forssmann: *De infinitivi temporum usu Thucydideo* in Curtius's *Studien*, vi, 1. The articular infinitive rises to an important element of the peculiar style of Thucydides. While his bulk is only six to Herodotus's seven, he uses the articular infinitive more than eight times as often and with great freedom. The genitive and dative are liberally employed. Instead of a sparing use of prepositions, he indulges in the construction without stint (fifteen different prepositions), and absolutely riots in the use of ἐν τῷ, which occurs seventy times. Of course present and aorist tenses preponderate, but the perfect is also used, and besides the articular infinitive with ἄν, he uses the articular future infinitive, which is a bold step—every time, be it noted, with a quasi *oratio obliqua* dependence on such words as "hope," "trust,"

“proof.” Of the use of the articular infinitive in Thucydides as a kind of substantivized *oratio obliqua* in the other tenses, I have not time to treat, and I regret exceedingly that I have not been able yet to analyze the usage of Xenophon in respect to the articular infinitive, especially as I am very much inclined to think that he was influenced by Thucydides. The rest of this paper must be devoted to the use of the articular infinitive in the orators, who are of especial value to the student bent on ascertaining the normal range of the language. I have studied all of them except Hypereides to this end, but my statistics are not so full as I could desire in regard to Lysias and Isocrates, although so large a proportion of each orator has been read that there can hardly be any very great error. For Antiphon, in addition to my own reading, I have had the advantage of lists made by Mr. J. H. Wheeler, late Fellow of the Johns Hopkins University. Mr. F. G. Allinson has done me the like service for Isaeus and Aeschines, Mr. W. H. Page for Lycurgus, Dr. E. G. Sihler for Dinarchus. Of Demosthenes I read about three-fourths myself, and the whole was read by Messrs. Page, Wheeler, and Savage, Mr. Page undertaking orations 1-18, Mr. Savage orations 19-34, Mr. Wheeler the rest to 59 inclusive. The standard of measurement is the page in the Teubner edition, which is fairly uniform for all contained in that series, except Antiphon and Andocides, who, together with Dinarchus, had to be estimated. Of course, I have excluded from the count of the pages, documents, introductions, and the like. It is not claimed that the result is absolutely accurate, but sufficiently so to show the bearing of the investigation.

Quantitatively the comparison of the orators shows the following order of occurrences :

Lysias,	.	.	.	.	.	12
Andocides,	.	.	.	.	.	20
Isaeus,	.	.	.	.	.	25
Aeschines,	.	.	.	.	.	30
Antiphon,	.	.	.	.	.	50
Lycurgus,	.	.	.	.	.	60
Isocrates,	.	.	.	.	.	60
Dinarchus,	.	.	.	.	.	80

The variation in Demosthenes is remarkable, and I will recur to it presently.

In the public orations the occurrence is . . . . . 1.25,

In the private orations . . . . . .80.

which certainly serves to bring out very forcibly the well-known preference of Demosthenes for this construction. The nearest approach to him is made by Dinarchus—the homespun Demosthenes, the rustic Demosthenes, the *κριθινός Δημοσθένης* of the ancients. Bookish Lycurgus, umbratic Isocrates come next. Then Antiphon, who uses it rather more freely than Thucydides. Low down stand Aeschines, Isaeus, Andocides, Lysias—Aeschines, the man of mere native cleverness, Isaeus, the man of practical business talent, Andocides, by no means a *littérateur*, and Lysias, in whom *ἡθός* reigns and in whom the narrative is the great thing. To come back to the variations in Demosthenes. They are indeed great, and would have furnished an illustration for the text from which his admirer, Dionysius of Halicarnassus, is never weary of preaching. Of course his case demanded especial care, and I separated the public orations from the private, inasmuch as it was to be expected that the difference of theme would show a difference in the number of occurrences. I then excluded from the count those of the public orations which are open to suspicion, and found the average of the remainder to be 1.25. The lowest average of the undoubted public speeches is presented by the Second Philippic (vi), in which the average is .87, the highest by the First Olynthiac, in which the average is 2.75. Both of these are short orations, and it may be unfair to judge by them, but it cannot be a mere fancy that the large number of articular infinitives in the First Olynthiac gives a peculiar tone to the oration. The long speeches vary as follows :

XXIV.	Contra Timocratem,	. . . . .	1.06
XXI.	Contra Midiam,	. . . . .	1.10
XIX.	De Falsa Legatione,	. . . . .	1.13
XVIII.	De Corona,	. . . . .	1.35
XX.	Contra Leptinem,	. . . . .	1.54
XXIII.	Contra Aristocratem,	. . . . .	1.62



The De Corona is almost exactly the mean between the highest and lowest. If the private orations be taken without criticism as they stand, the average will be about .80, but as the genuineness of so many of these is assailed, statistics will be of little satisfaction to those who share the popular tendency towards ἀθέτησις. In the earlier speeches the average is lower than in the later. So the first speech against Aphobus goes as low as .26. In the speech against Spudias, which, to be sure, is questioned, there is no occurrence, nor any in the speech against Callicles, in which Demosthenes approaches nearer to Lysianic ἡθός than in any other. The two highest are the speech against Conon, a masterpiece in which the δεινότης of Demosthenes and the simplicity of the supposed speaker are curiously blended (1.07), and the speech against Pantaenetus (xxxvii), in which the occurrences are 1.06, and which is a specimen of the grand manner by which Demosthenes sometimes betrays himself even in his private orations. The proëmium is a massive period, better suited to a stately public oration.

If I had time, I might treat of the variations in the other orators, as for instance in Lysias, who ordinarily has no fondness for the construction, and yet crowds an extraordinary proportion into the speech against Philon (xxxi), which, according to Blass 1, 477, marks an epoch in the history of Lysianic art. So I might call attention to the apparent coquetry of Isocrates with the construction in the Panegyricus, but it is high time to bring this paper to a close, and I must suppress what I had to say about the effect of massing the infinitive, and about the rare construction of the articular infinitive with αἰ, and the articular future infinitive, for which Demosthenes, of the orators, is our chief warrant.

In conclusion, then, suffer me to say a few words as to the stylistic significance of this construction. Is it a mere accident that one author employs the articular infinitive much more frequently than another? Is the use determined as much by the department as by the individuality? It would be rash, as I have said, to formulate, but the following con-

siderations may be of some weight for the further investigation of the subject, if it should seem worth the while.

The infinitive has sundry advantages over the abstract noun.

1. Language is capricious as to the development of its other abstracts, while the infinitive is always ready, and not only positively, but, which is a great thing, negatively. We find a goodly number of negative abstracts formed by the help of *αν-* (a privative); but they do not supply the needs of expression. We have an *ἀδυναμία*, an *ἀδυνασία*, an *ἀδυνατία*, but how often do they occur in comparison with *μὴ δύνασθαι*? What have we for *μὴ βούλεσθαι*, *μὴ ἐθέλειν*, *μὴ μέλλειν*?

2. Then the abstract noun often wanders off to a transferred signification, while the infinitive has the original meaning of the verb; *γνώμη* and *γιγνώσκειν* are not necessarily equivalents.

3. Besides, the abstract noun does not always sharply indicate the stage of the action, as the infinitive does. *Πάθος* can be analyzed into *πάσχειν* and *παθεῖν*, *λόγος* into *λέγειν* and *λέξαι*, *πρόσδος* into *προσέρχεται* and *προσελθεῖν*. *Πρᾶξις* is sharper than *πράξις*. *Τυραννεῦσαι* gives an element that *τυραννίς* does not. *Βίος* and *θάνατος* are not so clear as *ζῆν* and *θανεῖν*.

There are similar considerations as to the voices. *Γελασθῆναι* is clearer than *γέλως*—*ἀλλοτριωθῆναι* than *ἀλλοτριώσις*.

4. Finally, the infinitive takes up, with greater and greater ease, into this abstract relation its subject and its modifiers, and a whole complex is thus made the object or subject of the verb, whereas the regular abstract with its dependent genitive is less compact.

The only drawback then to the infinitive was the absence of the article; and as soon as the article was added the infinitive went on its new life.

The change was, as we have seen, prefigured in Homer, and the deictic or demonstrative use seems to have been the popular use. So in the exclamatory infinitive, and the numerous turns in which the demonstrative is contemptuous just for the same reason that *οὗτος* is contemptuous, and pointing is contemptuous and object and objectionable are used in a bad sense. Outside of this rudimentary popular use, the spread

of the articular infinitive seems to be due to conscious ratiocination, to the increasing tendency towards the employment of abstract nouns in varied relations; and the articular infinitive is consequently a gnomon of the reflective element, and cannot be left out of consideration in estimating the character of style.

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## II.—*The Yoruban Language.*

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The main body of African languages, omitting the Shemitic and the Hamitic, (the Berber, the Ethiopic, and the Egyptian,) fall into three groups: the Hottentot in the south, the Bantu occupying the whole center about as far north as the equator, and the Negro lying in Senegambia and Soudan, the last of which has as yet received little attention, while the structure of the others has been carefully studied and satisfactorily exhibited. On the Guinea coast, however, is found a group of dialects almost wholly different in vocabulary and structure from all of these, and offering interesting linguistic features. This group includes the Basa and Grebo of Liberia, but its most important member is the Yoruban, which is spoken by a partially civilized population of about two million people inhabiting the territory included between Dahomey, Borgoo, the Niger, and the bight of Benin. Its literature, which is wholly the work of Christian missionaries, consists of collections of proverbs, Bible-translations, and a few other religious books. Grammars have been written by Crowther, a native Yoruban, now Anglican Bishop (London, 1852), and the American missionary Bowen (Smithsonian Institution, 1858).

### I. PHONOLOGY.

The phonetic system consists of letters and tones.

The letters are exhibited in the following table:

	VOWELS.		HALF-CONSONANTS.					CONSONANTS.	
	Simple.	Diphth.	Breath.	Liquid.	Sibilant.	Spirant.	Nasal.	Sonant.	Surd.
Guttural, . . .	â a	ai au	h						
Palatal, . . . .	ê e i i	ëi ei		y			ng	g	k
Linguo-dental,	ô ũ	õi		r l	Sonant z (in dz)	Surd. s (sh)		n d	t
	o u	oi		w	.		f m	b p (in kp)	

Besides the three primary vowels *a*, *i*, *u*, there are the secondary (diphthongal) *e*, *o*, and the closed modifications of these, *a* (in *bat*), *e* (in *let*), *i* (in *bit*), *o* (in *not*), *u* (in *full*), and perhaps, also, *u* (in *but*). The sounds of *ai* and *au* seem to be real diphthongs; in the others the second vowel is very slight, and *ua*, *ue*, *ui*, *uo* are mere combinations of unmodified vowel-sounds; *au* is found in a few words only, mostly adverbs, and probably compounds. There is a partially prevalent law of vocalic harmony whereby vowels of personal pronouns and prefixes are made to accord with those of verbs and roots; the form of the objective pronoun is dependent on that of the preceding verb, thus: *emi sha a* "I wounded it," *o se e* "thou shuttest it," *on ti i* "he struck it," *enyin ro o* "ye provoked it," *awon ru u* "they stirred it," and so on through all the vowel-sounds. The subject pronoun *mo* "I," is used only before verbs containing the vowels *e*, *i*, *o*, *u*, while *mo* "I," is used only before *a*, *e*, *o*. This law prevails to some extent in prefixes to nouns, as, *aba*, *ebe*, *ibi*, *obo* (there are no words beginning with *u* except the object-pronoun, *u* "him"), but is not strictly adhered to, since it would make it impossible to derive more than one noun from each verb. In this obedience to a law of vowel-harmony the Yoruban stands almost alone among the African languages, and so far represents a

stage of linguistic development in which the sense of euphony prevailed over the sense of signification, a fluid condition of speech corresponding to the facility with which some barbarous tribes change their vocabulary.

The consonants, including the breath or aspiration *h* and the semi-consonants, are eighteen in number, and represent, as will be seen from the table, all the varieties except the guttural (not counting the simple aspiration as a guttural proper). There is only one spirant, the labial *f*, but the scheme of liquids, sibilants, nasals, and full breaks or consonants is nearly complete; the sonants occur somewhat more frequently than the surds. The surd labial *p*, however, is found only in the compound *kp*, which seems to come from word-composition; a similar origin is probably to be supposed for three other consonant-combinations of frequent occurrence, *dz* (*j*), *gb*, *mb*.

In its law of *tone*, whereby words spelled alike are distinguished in meaning, the Yoruban stands, to some extent, on the same plane with the Chinese, though the system is less elaborate than in that language. There are three main tones: the middle or ordinary, the acute or rising, and the grave or falling. Thus: *bà* is "to lie in ambush;" *bá* "to meet, overtake;" *bà* "to bespeak." In general, each word in the language has its own tone, which it retains unchanged, and which is a part of its form, whence the Yoruban has a distinctly musical sound. But in connection with the personal pronouns there is a law of tone-harmony by which these pronouns are brought into a certain relation with the verb. The personal pronouns all have, normally, the middle or ordinary tone, and this they retain when they express the subject or nominative case, and in the shorter objective forms when they are governed by verbs having the acute tone; but after verbs with middle or grave tone the object-pronouns take the acute tone, as: *okonri bá mi* "the man met me;" but *ode ta ó* "a wasp stung him;" *babba lù ó* "father beat him." In compound words the rule of tone becomes more complicated; in general there is an attempt to contrast and distinguish by difference of tone.

Polysyllabic words usually have the *accent* or stress of voice on the penult, with a secondary accent on the second preceding syllable; but in derivatives a verb having the rising inflection commonly takes the accent.

*Changes of letters.* Vowel-elision is common, and is governed by rules, in general a short vowel yielding to a long one (diphthong or grave); but there are many complications which have to be learned by practice. In addition to the law of vowel-harmony above mentioned, the *o*-vowel is subject to a modification, becoming *o* before *e* and *o*, and there are other interchanges not governed by recognizable law. Among the consonants the only regular euphonic change is that of *n* in *ni*, which becomes *li* before vowels; and the interchanges of *k* and *g*, *s* and *sh* are found. With these slight exceptions the language shows fixedness and precision of form.

## II. MORPHOLOGY.

1. *Roots and Words.* The *roots* are probably all monosyllabic, most polysyllabic forms easily resolving themselves into simpler elements, as, *olubodzwo* "inspector," made up of *olu* "chief" (from *lu* "to beat"), *be* "to go," *odzu* "eye," *wo* "visit" = "chief man who goes to visit with the eye." The roots consist mainly of consonant and vowel with or without nasal appendage; a few pronouns and adverbs consist each of a single vowel, but these may not be original. The words that begin with two consonants seem to be compounds (but in some cases these double consonants seem to be phonetic derivatives from single ones). No root is made by vowel plus consonant.

Inasmuch as the roots are monosyllabic and begin with consonants, there is a partial form-distinction between root and *word* in the case of many nouns formed by vowel-prefixes; and this derivation serves also to distinguish so far between verbs and nouns, since no verb begins with a vowel. Monosyllables beginning with consonants are either verbs, pronouns, or particles (which last are originally verbs or pronouns or interjections emotional or imitative); apparent exceptions come from contraction. Reduplication also distinguishes the

noun-word from the root. The Yoruban, in this respect, occupies a midway position between the inflecting languages proper, and those in which no difference is made between root and word.

2. *Word-composition.* Here the language is very rich. Composite noun-forms are made by derivation, by reduplication, and by composition proper; in fact, we are warranted in saying that all nouns are thus formed, the simple root now appearing only as verb or pronoun. We find, therefore, as is to be expected, a great variety of prefixes, monosyllabic and dissyllabic, which are combined with verbs simple or compound. The commonest prefixes are *a* concrete and *i* abstract, with the dissyllables *ati* abstract and *abi* concrete; as *abo* "shelter," *ifo* "the act of washing," *atibo* "the act of coming," *abila* "that which is striped." The vowels *e* and *o* are also used to form concrete nouns, and there are other dissyllabic prefixes, as *ada*, which denotes result, *abu*, mostly concrete, and *afi*="the maker" (from *fi* "to make"). The monosyllabic prefixes are probably demonstrative pronouns; *abo*="that which shelters;" we find similar uses of the pronoun in the present syntactical construction of the language. The law of vowel-harmony, by which the vowel of the prefix would be assimilated to that of the verb, has been modified by the necessity for variety of signification; usage has, in some cases, fixed one meaning to the noun formed by *a*, and another to that formed by *e*, though in other cases these prefixes interchange without change of meaning. The dissyllabic prefixes are themselves nouns formed from verbs, but no longer used separate; *abi* is from the verb *bi* "to beget, be," *ati* probably from a root *ti* "to finish" (compare *titi* "wholly, continually," and the auxiliary *ti* expressing completed action), *abu* from *bu* "to give," or *bi* "to be." Sometimes the verb without the prefix appears as the first element of a compound; but in this case a prefix seems to have been dropped, as *buba* "a hiding-place," from *ibi* "a place," and *iba* "hiding." By the combination of *a* with the verb *li* (= *ni*) "to have," is formed the prefix *al* (*el*, *ol*, etc.), signifying "possessor," as *alake* "the lord of Ake" (title of the

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*Foreign words.* There are a few words taken from Arabic, as *tuba* "repentance," *keferi* (*kaphir*) "unbelievers, gentiles, heathen;" from English, as *bann* (of marriage), and the Bible-words *baptisi* "baptize," *tempili* "temple," *furlong*, and from the Hausa language, *sinkafa* "rice," *takarda* "a book."

3. *Inflection.* As may be inferred from the forms already given, the Yoruban does not belong to the class of inflecting languages proper. It has some prefixes that have almost or quite lost their independent character, but the duty they perform is simply to convert verb-roots into nouns. As we shall see, there is a slight attempt to mark relation by different forms of pronouns, and there are certain temporal and modal words that have almost dropped their original meaning and become signs of relation, though they almost all retain their form unchanged, and are independent words. The language is, therefore, not agglutinative in the sense in which that term is used of the Turkish, for instance; it rather exhibits the first simple attempts of a primitive root-language to employ certain of its words to mark the distinction between the two main classes of substantive words, nouns and verbs, and to indicate, in a general way, the temporal and modal modifications of the latter, to which must be added that it has distinguished the particles (prepositions, adverbs, conjunctions,) with clearness.

A. *Nouns.* Nouns are without inflectional signs of gender, number, and case. *Gender* is marked, as in English, by different words, or by sex-words prefixed, but only where there is real distinction of sex; English, by a long process of unburdening, has reached the primitive position beyond which Yoruban has never passed. But while English retains the idea of grammatical gender as a heritage of its long historical development, this idea does not properly exist in Yoruban at



all; it has only sex-distinction, and this is, of course, confined to substantive nouns (there is no mark of gender in adjectives or pronouns). Difference of sex is sometimes marked by different words (as sometimes in Indo-European languages), as *baba* "father," *iya* "mother," *okonri* "man," *obiri* "woman," where there is no indication of gender, but the objects are regarded as distinct and independent, and have names given them in accordance with some prominent characteristic; *obiri* is from *bi* "to bear," *okonri* (from *oko*) perhaps from *ko* "to rule, guide." However, the words *ako* and *abo* naturally came to mean "male animal" and "female animal" respectively, and were then used to mark sex where there was only one word for the species of animal, *akomalu* "bull," *abomalu* "cow," *ako esin* "horse," *abo esin* "mare"; *ommo* "child" is defined by an added sex-word, as *ommo konri* "boy," *ommo binri* "girl," and so several other words. In the case of compound words, the sex will, of course, be marked by the sex of the principal component, as *bale* (= *oba ile*) "lord of the house," *iyale* (*iya ile*) "mistress of the house." As the language marks only real sex-distinctions, the conception of the "neuter" gender does not exist.

For *number* also there is no inflectional sign; but plurality is marked with sufficient distinctness, usually (where the connection does not make it clear) by the personal pronoun *awon* "they" put before the noun, as *Saulu nmi ilo ati pipa si awon ommo-ehin Oluwa* "Saul-was-breathing-accusation-and-slaughter-against-them-disciple-of the Lord," "against the disciples of the Lord"; this *awon* must be repeated before each separate word; or, if the noun refer to a person addressed, the second personal pronoun *enyin* "ye" is used, as *ki enu ki omase ya nyin, enyin arakonri*, "do not wonder, ye brother," = "brethren"; the more emphatic demonstrative pronouns *wonyi* "these" and *wonni* "those" may also be employed in the third person. Plurality is expressed, also, by simple repetition of the noun, and this repetition is necessary when the idea of reciprocity enters.

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object, usually, after it. For the sake of emphasis the object sometimes stands first, and its syntactical character is made clear, either by the connection of thought, or by the collocation of words, as *on li a wi fu* "him-it is-we-spoke-to" = "we told him." So, the defining relation in which one noun stands to another is frequently expressed by position merely, the defining word following the defined (as in Hebrew): *okto obba* "ship-king" = "king's ship." This relation is sometimes expressed more exactly by the relative pronoun *ti* (quite as in Aramaic), as *ona ti ilu* "road of town," literally, "road-which-town." All sorts of relation are thus indicated, but the insertion of the *ti* is necessary when possession is to be predicated, or where without the *ti* the second noun might be supposed to be in apposition with the first: *Atiba oba* "Atiba the king," but *Atiba ti oba* "Atiba (the servant) of the king." In this case the relative pronoun seems to have its own proper force, = "which" or "that which"; so in such a sentence as: *nwon se ti orisa*, literally, "they-do-what-idol," that is, "they do what pertains to idols, they worship idols." The *ti* is much employed to express this general, indefinite sort of relation, which is left to be understood from the connection. The person addressed is indicated by the simple noun, with or without personal pronouns, or by some interjection, as *o* (put after the noun), or some demonstrative pronoun indicating greater or less nearness (*yi*, when the person addressed is quite near the speaker, *na*, when he is a short distance off).

*Adjectives.* The Yoruban seems not to have differentiated the adjective proper; its descriptive words are predicative, that is, they are treated as if they included the copula, and therefore fall, technically, into the class of neuter verbs. To indicate that a quality pertains to a substantive, the name of the quality itself (abstract noun) is appended by way of definition, as *ohun didara* "thing of goodness" = "good thing"; or the possessor of the quality (concrete noun) is preposed in apposition, as *alagbara enia* "strong one-person" = "strong man"; or a descriptive relative phrase is added, in which the neuter verb is used, as *ida ti o mu* "sword-which-it-is sharp" =

“a sharp sword”; or, when the qualified substantive is the subject of a verb, the quality is predicated of its subject in a simple sentence, and the affirmation of the verb is added in a relative sentence, as *enia re li o se e* “person-is good-it is-that-did-it” = “a good person did it.” It may be said, then, that the function of our adjectives is wholly performed in Yoruban by substantives and verbs; the abundant use of neuter verbs is a sign of failure to differentiate either the adjective or the copula.

*Comparison.* Hightening of intensity is expressed by *dzu* and *dzu loh* = “exceedingly” and “more”; in connection with numbers *le* is used. The highest degree of intensity may be expressed by *dzu gbogbo* (= “surpassing all”) or *tan* (= “completed”), put after the adjective.

*Numerals.* The numeral system is very well developed, both in extent of numbers and in the expression of the various relations of the numbers. The ten units are as follows: *eni* (and *okan*), *edzi*, *eta*, *erin*, *arun*, *efa*, *edze*, *edzo*, *esan*, *ewa*, twenty is *ogun*, thirty *ogbon*, two hundred *igba*; of these the last-named = “heap,” so called because cowries (the shell-coin of the country) are counted in heaps of two hundred each; the origin of the others is obscure. From 11 to 14 the numerals are formed by adding *la* (= “great”) to the units (*okanla*, *edzila*, etc.); from 15–19 by subtracting the proper unit from 20; from 21–24 by adding units to 20; from 25–29 by subtracting units from 30, and so on; multiples of 20 are used up to 180 (40 is *ogodzi* = twice twenty, and so on), the intermediate tens are made by subtraction of ten from the next higher (fifty, *adota* is sixty, *ogota* less ten *ewa*); in the same way multiples of 200 are used. The first unit *eni* is used only in counting; *okan* is employed independently, = “one person,” *kan* with a noun. A singular usage in connection with the other units is the prefixing of *m* to them when they are attached to nouns expressed or understood, as *enia meua* “ten men”; in Bowen’s Grammar it is suggested that this *m* is from the verb *mu* “to catch” in the sense of “amounting to,” on the ground that when an African [Yoruban?] speaks in English he generally says “he catch ten” for “there were

ten." *Ordinals* from 1 to 19 are made by prefixing *ek* (or *ek*, according to the law of vowel-harmony) to the cardinals: as, *ekini* "first," *ekedzi* "second," etc. (or, *kini*, *kedzi*); they follow the noun. Examples of *distributive* numerals are: *metameta* "three by three" (doubling of *meta*, which is from *eta* by prefixing *m*); *okokan* "one by one" (reduplication of first syllable of *okan*, where the *m* is not prefixed); *ōkōkan* "one cowry each" (from *ōkan* "one cowry").

B. *Pronouns*. The substantive relational material of the language (which, for convenience, is treated here before the verb) is comparatively full, yet simple; the varieties of form seem to come from the working of euphonic rules rather than from effort after delicate distinctions of thot. 1. *Personal Pronouns*. These are entirely without inflection, and lacking not only in the rich generic development of the Hottentot, but in all distinction of gender. It will be more convenient to take the persons one after another.

*First person*. The singular is *emi*, the plural *awa*, between which we should not expect to find any obvious relation (since "we" is not the plural of "I," but = "I and others"). These may be used everywhere, under all circumstances. But, in accordance with the law of vowel-harmony already explained, there are two modified forms, the open *mo* used optionally when the first vowel of the following verb is *e* or *o*, and the close *mo*, used when that vowel is *e*, *i*, *o*, or *u*. If, however, the verb is future, the euphonic forms are not allowed; another form *n* (*ng*) is then employed, and this is found also before the negative *ko* (*ko*) "not." This *ng* seems to be the nasalization of the *m* of *emi*, apparently a euphonic change induced by *k* and the *o* of the future: *ng o ri* "I shall see," *ng ko ri* "I do not see." The abbreviated form *mi* sometimes stands absolutely at the beginning of a citation, the verb of saying being omitted: *mi nibo* "I (asked) where?" (which comes possibly from contraction with the verb *wi* "to say"). When the pronoun stands as object, frequently the full forms are employed, but sometimes the abbreviated forms *mi*, *wa* ("me," "us"), where the abbreviation is euphonic and not inflectional, (and possibly these shorter forms are the original). These

latter are used in general when the pronoun follows the verb or the noun in a simple and unemphatic way; but if there be any emphasis, as, if the pronoun stand at the beginning of the sentence, or if the relative *ti* precede or follow it, or if two pronouns be connected by a conjunction, or if the reflexive *na* ("self") follow, or often for euphony, the full forms are employed.

*Second person.* Full forms: *iwó* "thou," *enyin* "ye;" euphonic, open *o*, close *o*; there is no special form before future verbs. The short forms after verbs (object) are *o* and *nyin*; but after nouns, while the plural form is the same, the singular is not *o* but *re*, the origin of which is not clear; it seems to be a demonstrative pronoun or a noun (it is found in the third person also).

*Third person.* Full forms, used for subject, *on* (*on*), *awon* (and *nwon*); the plural has also the short form *a*; the euphonic open is *o*, and close *o*; the short *i* used in citations (as *mi* above), possibly out of *o wi* "he said." Before future verbs is sometimes found the demonstrative pronoun *yi* in the sense of "he," for which in some cases *a* is used. The usual plural subject is *nwon*; *awon* is used before the relative *ti* (and frequently as plural sign before nouns, as above explained). As object after verbs the plural third person is *won*; the singular shows a great variety of forms, *o*, *o*, *u*, *a*, *e*, *e*, *i*, conforming itself, according to the Yoruban law of vowel-harmony to the vowel of the preceding verb. After a noun the objective or defining form is *re*, the same as in the second person.

*Emphatic, Reflexive, and Reciprocal.* The simplest emphatic addition to a personal pronoun is the demonstrative *na* "this," as, *iwe ti emi na*, "book of me this one," "my own book." Greater emphasis is given by the substantive *kpākpa*: *emi kpākpa* "I myself, my very self." More common is *ara* (= "body," as the Rabbinic *esem* "bone"), which is treated as a noun and followed by the shorter, defining form of the personal pronoun: *o fe ara re*, "he loves body of him" = "he loves himself"; it is also reciprocal: *nwon fe ara won* "they love one another" (literally "body of them"). Out

of *ati* "and" *eki* "only" and *ara* is formed *tikara*, which is used as subject emphatic pronoun: as, *on tikara re di ara re*, "he himself binds himself."

*Demonstratives.* The simplest forms are *yi*, *na*, *ni*, "this, that," with the plurals *wonyi* "these," *wonni* "those" (compounded of the *won* found in the third personal pronoun); they follow the nouns they qualify. From *yi* are formed *eyi*, *eyiyi*, *eyini*, *alayi*, *eleyi* "this," with plurals *awonyi*, *iwonyi*, *nwonyi*, and from *na* comes *onna* "that," plurals *awoni*, *awonna*; these are used as independent substantives. *Na* and *ni*, especially the latter, have the force of the definite article.

The *Relative ti* is without variation of gender, number, or case, and (as in Hebrew) a personal pronoun is often introduced for the purpose of defining the subject of the relative clause, as *emi ti mo mo* "I-who-I-know," "I who know"; or, the indefinite *o* (or *o*) is employed, as *o si damu awon Ju ti o wa ni Damaskus* "he-and-confounded-them-Jew-who-he-lived-in-Damascus," "the Jews that lived in Damascus"; this *o* (properly third person singular) is used for all persons and numbers. In like manner if the relative stand in a defining relation to a following noun, this relation is expressed by a personal pronoun, as *okouri ti omo re de* "man-who-son-of him-came" = "the man whose son came." As antecedents to the relative are employed *eni* "one," and *eyi* "this," or sometimes nouns.

*Interrogative and indefinite.* First the demonstrative *ta* (probably connected with the relative *ti*) is frequent as interrogative pronoun, usually having the demonstrative *ni* attached to it: *iwo ta ni Oluwa* "thou-who-Lord," "who art thou, Lord?" After a transitive verb it introduces the dependent or indirect interrogative clause, as *emi mo tani o lu* "I-know-what-he-struck." *Tani* may follow a noun as a defining term, *ile tani* "house of whom." A further illustration of the demonstrative origin of the interrogatives is found in the fact that *ti* is used in questions as = "what?" alone or preceded by the interrogative *bi*: *bi emi ti nse* "whether-I-what-am doing?" = "what am I doing?" Here the *bi* precedes as a



general interrogative sign (as Latin *an*), then follows the personal pronoun as subject, then the question-word proper, and then the verb. Other interrogatives are *ki* and *wo* variously combined (in origin demonstrative), the former inserted between the parts of a reduplicated noun giving an indefinite sense.

C. *The Verb.* The Yoruban verb has no form-distinctions: for all persons, genders, numbers it remains the same, but this lack is readily supplied (as in English) by the use of the personal pronouns. In respect to modifications of the idea of the stem, the language has pursued an entirely different path from that taken by the southern families of dialects, the Hot-tentot and Bantu, having developed no system of derived stems (Causals, etc.) such as is found in them. Yet, while it maintains its isolating character, its words standing sharply apart in almost Chinese separateness, it has means of expressing the ordinary temporal modifications of the verb-idea with sufficient distinctness by the insertion (prefixing) of words that have almost lost their independent signification and may thus be called half-inflections; it even makes an approach to modal expression, and has a number of agglutinations corresponding to the English "may, can, ought," etc., expressing permission, ability, obligation, desire, etc., these auxiliary words retaining their full force, yet idiomatically sinking into appurtenances of the main verbs to which they belong. The following are the principal forms employed in this auxiliary way. First, the conditions of *completedness* and *incompletedness* are distinguished, the former being marked by *ti*, the latter by the sharp nasal *n* (*ng*); *ti* is naturally the sign of past time (in which we naturally think of actions as complete), but also of finished action in present time (our perfect); *n* is used of present or past, and may be prefixed to *ti*. As to the origin of these forms *n* is probably connected with the substantive verb *ni* to be mentioned below, and *ti* with a root *ti* or *ta* meaning "finish" (see the verb *tan* = "to be finished," with which also may be brot into connection *to* "to be sufficient, attain to"). *Ti* may be used with any time-combinations to indicate that an action is past with reference to any

other. In some idiomatic uses it seems to stand as an independent verb (not a time-auxiliary): *mkpa ise owo ti wah* "by-labor-money-finish-come" = "by labor money comes"; *on ko le ti so eso* "it-not-able-finish-bear-fruit," = "it cannot bear fruit."—*Future* time is expressed by *o*, the origin of which is doubtful; it seems probable that it is connected with the third singular personal pronoun *o*, in which case *emi o ni* "I shall have" is literally, "I-he-have," or, "I am he who is to have." Often it is preceded by the demonstrative *yi* (compare the similar combination *ti o* above mentioned): *ou yin ton ona mi se* "he-will-again-way-my-make" = "he will prepare my way"; in *ou yi o se* the *yi* and *o* act as demonstrative and relative: "he-that one-who-make." In certain cases *a* is used instead of *o*. There is another word *ma* which seems to mean intensity and repeatedness, and is used to express habitual or continued action: *on yio ti ma bo* "he will have been coming"; it also expresses desire in the first and third persons, and permission in the second, and this use, perhaps, points to a different root (the word occurs also as a negative). With all these forms may be employed the substantive verb *ni*, which gives fullness to the expression: *emi ni ri* "I-am-see" = "I am occupied with seeing."

Of *modal* forms there are no very clear examples. Certain words are used in combinations out of which modal ideas naturally arise; but it does not appear that these are connected with these words except in a very general way. Such a word is *ba* (= "reach, attain"), which occurs in conditional sentences, as: *bi iwo ba ri i kpa a* "if-thou-reach-see-it, kill it" = "if thou see it, kill it"; here the sense of uncertainty is involved in the whole sentence, and does not seem to connect itself particularly with *ba*, which also is, in other cases, used in a pure indicative sense. A similar remark may be made of the dependent sentences introduced by the particle *ki* "that": the modal sense comes out from the general structure of the sentence, and is independent of the *ki*. A peculiarity of this construction is that when the nominative begins with a consonant or consists of two or more syllables, the *ki* is repeated (for the sake of clearness or emphasis), and may

be when the pronoun is *on*: *ki on ki ole imu u* "that he should seize them." *Le* "can, be able," *gbodo* "dare," and some others are used as independent verbs, without modal force.

*Gerund.* The above construction of dependent sentences with *ki* (introducing substantive, telic, and other clauses) is employed when the subject of the dependent clause is different from that of the principal. When the two subjects are the same, a gerund is used, made by prefixing *i* to the verb, as *iwo* "seeing (videndum) from *wo* "to see": *mo wa iwo nyin* "I-come-seeing-you" = "I come to see you." Sometimes this form occurs in independent sentences, and then appears to be an emphatic assertion of the act instead of the ordinary verb-root: *ki* (= *ko*) *ise awodi* "not-the being-a hawk" = "it is not a hawk." Along with this may be mentioned the forms *aba* and *iba* (from *ba* "to meet"), expressing obligation: *emi aba* (or, *iba*) *se e* "I-the being bound-do-it" = "I ought to do it." *Iba* is also used for "if," and *iba . . . iba* = "whether (either) . . . or": *iba ise okonri, iba ise obiri* "whether men or women," literally, "coming on (supposing)-the being-men-supposing-the being-women." Besides this abstract noun with prefix *i*, others formed by prefixes *a* and *ati* are similarly employed.

*Passive.* The passive is not made from the reflexive, nor by the addition of a modifying root, but by a simple use of the ordinary verb or noun. Most commonly the active with the indefinite subject *a* "they" is employed: *a ri i* "he is seen" (literally, "they see him"). Or, a gerundal construction is used (the abstract noun of action): *ile se imi*, "the earth-is-as to shaking" = "the earth is shaken." In the same way may be employed (with *ni*) the reduplicated nouns made by doubling the first syllable of a transitive verb, as *riri* from *ri* "to see": *riri li* (= *ni*) *emi*; "as to seeing-am-I" = "I am seen." Finally, the compound transitive verbs may be used as passives: thus, from *ba . . . dze* (= "meet . . . spoil") "consume," we have: *iwe ba-dze* "book consume" = "the book is consumed."

*Participles.* Our participles may be rendered by the continuous form made by prefixing *n* to the root, or by independent clauses.

*Substantive Verb.* The Yoruban shows a profusion of substantive verbs, such as is natural in a primitive, unliterary language; the different forms are however distinguished by usage with some clearness. The most common form, and the one that approaches nearest the simple copula is *ní* (before vowels *lí*), the origin of which is not clear; the only word that offers a probable explanation of it is *ní* "to have," from which the substantive force may have come somewhat as in French *il y a*. *Ní* is frequently used as = "it is," and appears often where its only effect seems to be greater fullness of expression, tho it has of course fixed itself in various idiomatic phrases; there is sometimes a heaping up of auxiliary words, such as we find in Aramaic or in some French phrases. Examples of its use are: *emi ní ri*, "I-am-see" = "I see;" *awa lí o se e* "we-are-that-did-it" = "we did it"; *iwó ní yí o ri*, "thou-art-he-shall-see" = "thou shalt see." Of verbs expressing existence proper, there are *mbe*, *gbe*, *wa*. The first of these (from *bí* "to beget") is used for absolute existence, = "exists," the second (also from *bí*) merely takes the place of *mbe* in the imperative and in certain dependent sentences, the third, (meaning "to dwell") is used of existence in a place. Modal existence is expressed by *ri*, which seems to be connected with the verb *ri* "to see": it is used with such modal words as *behe* "thus," *bí* "as." *Se* (= "to do") denotes the occupying a position, which calls for exertion; thus, *oba lí (= ní) on* means "he is (is described, known as) a king," but *on se oba*, "he fills the station of king"; so also nearly *dze*. To these may be added *si*, expressing existence in a place, and used chiefly in negative sentences, and *dí* = "become."

SYNOPSIS OF THE VERB *ri* "TO SEE."

I see or saw . . . . .	<i>emi ri</i>	or <i>emi ní ri</i> .
I saw or have seen . . . .	<i>emi tí ri</i>	or <i>emi lí o tí ri</i> .
I am or was seeing . . . .	<i>emi nri</i> .	
I have or had been seeing	<i>emi tí nri</i>	or <i>emi ntí nri</i> .
I shall or will see . . . .	<i>emi o (or a) ri</i>	or <i>emi ní o (or ní yí o) ri</i> .
I shall or will have seen	<i>emi o tí ri</i>	or <i>emi ní yí o tí ri</i> .
I may or would see . . . .	<i>emi ma ri</i> .	
I might or would have seen	<i>emi ma tí ri</i> .	

To these might be added potential forms with *le*, conditional

forms with *ba* (introduced by *bi*), and others that do not properly belong to the synopsis. The above shows sufficiently the isolating method of the language, and the fullness of its verbal forms.

D. *Particles*. *Adverbs* are derived from verbs and nouns. They follow the words they qualify except those expressing negation, those formed from *fi* "with" and nouns and some others. The language abounds with adverbs of time and place, and such as express some particular quality, and a degree of some particular quality, but has failed to abstract the conception of degree, and to supply words for it; it has, therefore, as is the case with many half-developed languages, a host of locally descriptive words, and a paucity of general terms.

*Prepositions* also come from verbs and nouns. The same minute local descriptiveness is found among them as in the adverbs. Local prepositions proper are susceptible of three forms; one used when the sentence expresses rest, the second when there is motion from the object to the subject, the third when the motion is in the opposite direction.

*Conjunctions*. The language has several words for the simple copulative, and a good store of adversative, illative, concessive, causal, telic, and temporal connectives.

### III. SYNTAX.

In conclusion, some more general observations on the syntactical structure of the language may be added.

In the simple sentence the usual order is: subject, copula, predicate; the attributive adjective (or pronoun) usually follows its substantive; the substantive verb is usually inserted, whether the simple *ni* (*h*), or one of the forms that express existence in a more definite way. The language is, indeed, fond of the repetition of these words, and of pronouns, personal and demonstrative; in the absence of inflections it resorts to this repetition to secure distinctness or emphasis, and so constructs sentences that seem ungainly to us. It is unfortunate to call this use of pronouns and other words "pleonastic," a term that, so far as it is accepted, shuts out

the investigation of the peculiarities in the modes of expression of the language. In general, when a noun (whether subject or object) is separated from its verb, clearness of reference is gained by the insertion of a personal pronoun: *awon alagbase baba mi melomelo li o li ondze* "they-hireling-father-my-how many-it is-he-have-food" = "how many hirelings of my father have food," where the vividness gained by the "it is" and the general subject "he" is obvious. So the insertion of the personal pronoun after the relative: "give me the inheritance" *ti o tori mi* "which-it-belong-me"; and, after verbs of saying: *o tenumo o kpe on ko se e* "he-said-it-namely-he-not-do-it" = "he said that he did not do it." The substantive verb is often employed to represent a subject or clause, as in the first example above given, summing it up and holding it separate before the mind, somewhat as in the English expression "there is."

The various parts of the composite sentence are commonly regarded merely as standing to one another in the relation of sequence (as in Hebrew). Dependent clauses, however, are frequently introduced by appropriate conjunctions, expressing relations of time, manner, purpose, cause, and the like. Conditional clauses are introduced by *bi* "if" or *iba* (= "obligation"), the verb *ba* then standing regularly with the main verb, and the shade of the idea (as to certainty or uncertainty) is left to be inferred from the general connection. Our participial constructions are expressed by a simple verb in an independent clause, or by a separate clause introduced by a conjunction, or by an abstract noun of action. The latter plays an important part in the language, like that of the infinitive and gerund in English. It occurs as simple subject or object, and often expresses purpose; in many cases it stands instead of the finite verb. It may then be introduced by the preposition *li* "in, in regard to" or not; if the preposition be absent, the noun is to be taken absolutely, as defining the verb simply by the expression of the idea.

### III.—*Influence of Accent in Latin Dactylic Hexameters.\**

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In my paper on trimeters (Transactions Am. Phil. Assoc., 1876), the investigation had much to do with the word-feet  $\cup\cup\cup$ ,  $\cup\cup\cup$ ,  $\cup\cup\cup$ ,  $\cup\cup\cup$ ,  $\cup\cup\cup$ , the object being to ascertain on what syllables the ictus could fall. In hexameters we have nothing to do with this question, for in the first three the ictus cannot fall on the accent, and in the last two it cannot fall anywhere else. In words, on the other hand, that are composed of long syllables, we are not to expect so much influence of accent as was found in iambs, for in the latter a so-called spondee partakes of the nature of an iambus, having its thesis (i. e., ἄρσις) shorter than its arsis (ῥίσις), whilst in dactyls the two are equal, and the ictus is more nearly uniform from beginning to end of the verse. Further, when Ennius introduced hexameters, he imitated Greek models and instituted a more artificial sort of verse, in which quantity could not be so much neglected, and so did not compose so much after the norm of popular usage.

Having examined the extant hexameters of Ennius, I find, accordingly, that he entirely disregarded accent. This is evident from the fact that in the fifth and sixth feet, where the usage of later poets shows it to be easy to place the ictus on the accent, he has discord between ictus and accent as frequently as it occurs in Homer or Hesiod, *read with Latin accent*; and in the latter case the coincidence of ictus and (Latin) accent is due entirely to the system of accentuation and the structure of the verse. And, further, Ennius preferred the masculine caesura (with conflict between ictus and accent) to feminine, where there is no such conflict.

\* This paper contains the substance of a dissertation published in Latin at Leipzig in 1874. The edition was so small that its reproduction in English seems justifiable. As a review of the dissertation in Bursian's *Jahresbericht* for 1877 misrepresents it, great care has been taken to make no changes of any importance, except such as were necessary in order to reduce its size.

But in the fifth and sixth feet, the form of the verse *generally* causes ictus to fall on accent without any effort on the part of the composer. Any one, by a little reflection, can see why this is so, and *that* it is so, is shown by Greek verses read with Latin accent. The caesurae, on the other hand, cause conflict up to the fourth foot, where their relation is variable. Hence we see that, whether the composer wills it or not, there will generally be conflict in the earlier feet of the verse, and coincidence in the last two,—a sort of strife followed by a reconciliation. Consequently, in the course of time, when the ear became accustomed to this, it appeared to be a property of the verse, so that verses in which it did not happen, seemed strange and harsh. Hence poets began to seek conflict followed by coincidence, and the more they did this, the more objectionable became verses in which it was neglected. Accordingly, the poets of the Augustan age have conflict in the first few feet more frequently than Ennius, and in the last two feet more rarely; nor can any one read hexameters much without coming to feel that this peculiarity renders the verse pleasing, and peculiarly so, when words employed in one line are repeated in the next with the relation of ictus to accent varied. A beautiful example of this is found in Catullus (LXII, 20–22):

Hesperē, qui coelo fertur crudelior ignis?  
 qui *natām* possis *complēxu* avellere *mātris*,  
*cómplēxū mātris* retinentem avellere *nātām*.

(See also Virg. Bucol. VIII, 47–50 and in the poets generally.) The frequency of this shows that it was purposely done by the poets.

§ 2. So far the discussion has been general; but now I proceed to examine the different authors, and shall begin with the origin and trace out the development of the artificial relation of ictus to accent, and shall briefly consider the arguments of those who deny to the accent any influence.

In order to have a rule by which to measure the phenomena, I shall examine Greek verses read with Latin accent; for by this means we come at what would have been the state of affairs, had all been left to chance. The general discussion



will be confined to the last two feet; and in ascertaining the relation of ictus to (Latin) accent in Greek, and comparing with the same in Latin, I confine myself to the fifth foot. In Hom. Od. I, containing 444 verses, the ictus conflicts with Latin accent in the fifth foot

in 15 verses where  $\cup \cup$  | follows.

" 32 " " |  $\cup \cup$  — — follows.

" 16 " " something else follows.

But the word-feet  $\cup \cup$  and  $\cup \cup$  —  $\cup$  are more numerous in Greek than Latin. To show this, since many verses of Ennius are not entire, I employ 444 verses of Virg. Aen. I, and compare with Od. I, containing 444 verses.

In Od. I we have  $\cup \cup$  . . . 176

$\cup \cup$  —  $\cup$  . . . 101

In 444 of Aen. I,  $\cup \cup$  . . . 134

$\cup \cup$  —  $\cup$  . . . 21

I omit words combined with -que into the form  $\cup \cup$  —  $\cup$ , as I should otherwise have to recognize Greek words of the form  $\cup \cup$  — followed by monosyllabic enclitics. Now to find what would be the relation of ictus to Latin accent in Greek, if the forms  $\cup \cup$  and  $\cup \cup$  —  $\cup$  were not more numerous, we reduce thus:

for  $\cup \cup$ ,  $176 : 134 :: 15 : 11 +$

for  $\cup \cup$  —  $\cup$ ,  $101 : 21 :: 32 : 7 -$ .

Then  $11 + 7 + 16 = 34$ , which would be the total number of discords in the fifth foot. Now in the 541 verses of Ennius there are 36 conflicts, which in 444 would be 31, which is practically the same as in Homer (34). But I have also examined Iliad III in the same way, and, omitting proper names, I find the conflicts a little *rarer* than in Ennius. We can affirm, therefore, that in the aggregate the verses of Ennius do not differ in this respect from those of Homer, from which it appears that Ennius paid no attention to accent. In examining others, therefore, I shall compare all with Ennius's usage as being accidental. Conflict in the sixth foot being occasioned by a final monosyllable, and in the fifth foot by caesurae in that foot, it will be important to note *all* instances of monosyllables at the end and of caesura in the

fifth foot, even when elision or a preceding monosyllable prevents conflict. I shall also record other peculiarities. When a dissyllable becomes a monosyllable by elision, the fact will be noted. Of course no special notice will be taken of verses which exhibit no peculiarity. The annexed table\* shows the result of the examination of Ennius's Fragments containing 541 verses, Lucretius III, 1,092 vv., Hor. Sat. I, 1,025 vv., Hor. Ep. I and part of II, 1,000 vv., and all the works of Virgil, 12,869 verses with complete endings. Of course these numbers must be taken into account in comparing the result for the different authors. These are selected for the table as representative poets, but others will be included in the discussion that follows. It is scarcely possible that all the figures should be exactly correct, but they are nearly enough so for the present purpose.

1. For Ennius we collect the following result :

Caesurae after fifth arsis (1) with conflict	28
(2) without conflict (a) monosyl.	32
(b) elision (a) diassyl.	5
(β) polysyl.	5 42
In sixth foot, caesurae (1) with conflict	40
(2) without conflict (monosyl.)	5
In fifth foot conflicts without caesura (1) -que	4
(2) otherwise	8 12
Spondees in fifth place (σπονδειαζοντες)	13
Verses with both feet contained in one word	25

From this we see that in the sixth foot the conflict takes place (in proportion to the number of caesurae) much more frequently than in the fifth, and is more frequent, even, than in Homer. Here we are not to infer that he strove after conflict, but that he frequently imitated certain Homeric endings (with caesurae in sixth foot) which especially pleased him; and this imitation he sometimes carried to an extreme, as when, induced by *νιός ἐμὸν δῶ, χαλκοβατές δῶ*, etc., he wrote *endo suam do, altisonum cael, laetificum gau*, etc.; and, in imitation of Tmesis, "*saxo cere- comminuit -brum*." Those who

\* See page 43.

Form.	En.	Lucr.	Hor. S.	Hor. E.	Virg.	Examples.
— — — — —	11	1	30	14	14	ignis mare ferrum
— — — — —	11	1	3	1	29	rubens hyacinthus
— — — — —	0	0	5	1	0	amatorem quod amici
— — — — —	2	0	0	1	0	stolidi soliti sunt
— — — — —	0	0	5	2	2	medicum roget ut te
— — — — —	4	0	0	0	12	purpureo narcisso
— — — — —	13	24	78	49	130	te quoque dignum
— — — — —	13	17	8	2	5	an Meliboei
— — — — —	1	7	14	8	1	rem facias rem
— — — — —	0	0	0	0	1	si qua tibi vis
— — — — —	0	4	2	2	6	aut quod ineptus
— — — — —	1	0	0	0	2	et magnis dis
— — — — —	1	4	7	8	8	iam data sit frux
— — — — —	3	2	0	0	0	sic compellat
— — — — —	0	0	1	0	0	aut etiam ipse haec
— — — — —	0	0	3	0	0	non ego avarum
— — — — —	0	0	1	1	0	stans pede in uno
— — — — —	0	0	5	0	8	saepe ego longos
— — — — —	3	13	3	0	1	mentem animumque
— — — — —	2	4	3	0	4	atque oculi sunt
— — — — —	0	0	1	0	0	quanti olus ac far
— — — — —	0	0	1	1	0	antestari ego vero
— — — — —	4	10	1	1	17	solidoque elephanto
— — — — —	1	1	1	0	0	scripsere alii rem
— — — — —	0	2	0	0	0	texere et in illam
— — — — —	25	26	29	18	31	adfixit habes qui
— — — — —	7	2	14	1	8	exiguus mus
— — — — —	1	0	0	0	0	sublatae sunt
— — — — —	3	16	38	37	37	obstitit et nox
— — — — —	0	0	3	1	2	iugera centum an
— — — — —	0	0	0	1	0	ridere decorum et
— — — — —	0	0	7	2	0	audivit at in se
— — — — —	1	2	0	0	0	isque pium ex se
— — — — —	20	46	15	6	21	Alcimedontis
— — — — —	5	5	0	0	16	incrementum
— — — — —	0	4	5	2	1	indicium illud
— — — — —	4	7	0	7	112	promissaque barba
— — — — —	0	0	1	0	15	Ephyreique aera
— — — — —	0	0	0	0	1	omniaque in se
— — — — —	0	0	1	0	0	servareque amicos
— — — — —	0	0	0	1	3	arvaeque et urbis
— — — — —	0	0	2	0	15	caloremque   Inter, etc.
— — — — —	0	0	0	0	5	tôtasque   Advolvere, etc.
— — — — —						make up all the rest, that

is, Ennius 405, Lucretius 894, Hor. Sat. 738, Hor. Ep. 833, Virgil 12,372, the per cent. of peculiar endings to the entire number being, Ennius 25, Lucr. 18, Hor. Sat. 28, Hor. Ep. 17, Virgil 4.

think that such a treatment of words was common at Rome, are called upon to accept

“*Massili- portabant iuvenes ad litora -tanās.*”

In the fifth foot the ratio of caesurae with conflict to those without it is about what we should expect (28 : 42) if it were left to chance. In Hesiod I have found the ratio a little larger, but this is due to causes already explained.

2. Now we come to Lucilius ; but we need not wonder if no great progress was made by a man who prided himself on “standing on one foot and composing two hundred verses in an hour.” Yet it will not be uninteresting to see how he differs from Ennius, especially as he did not follow Greek models so closely. The 925 verse-endings (in which the text is often doubtful) show this result :

Caesurae after fifth arsis (1) with conflict	10
(2) without conflict (a) monosyl.	45
(b) elision (a) dissyl.	8
(β) polysyl.	11 64
Caesurae in sixth foot (1) with conflict	35
(2) without conflict (a) monosyl.	22
(b) elision (a) dissyl.	1
(β) polysyl.	4 27
Conflicts in fifth foot without caesurae,	
(1)   ' — — '   —	10
(2) ' — — '   ' —	5 15
Fifth spondees,   ' — ' —, 1, — ' '   — ' —, 1	2
Both feet in one word	31

Comparing this with Ennius we see (1) that caesura in the fifth foot is somewhat rarer, and that conflict is much rarer, but that accent on short syllables is disregarded ; (2) that caesura in the sixth foot is not quite so frequent, and that a considerably less proportion have conflict, though the conflict still predominates ; (3) that *fifth spondees* are much fewer ; and (4) that both feet are something less frequently contained in one word (for 925 : 541 is greater than 31 : 25). Of course no great importance is attached to slight differences, but in the two main points (caesurae with conflict in the fifth and in the sixth foot) the difference is considerable, the ratio

being, in the fifth 1 : 5, and in the sixth 1 : 2. But Lucilius did not hesitate to place an ictus on a grave syllable, provided there was another on the accent. Instances are rarer than in Ennius merely because he did not indulge so much in high-sounding compounds, such as "*altisonantes*," "*sapientipotentēs*." But there are two points to be specially noted: *first*, while conflicts grow rarer, the caesurae without conflict also grow rare, but not in the same proportion; and *secondly*, already in Lucilius, if the verse ends in an ionic word, | — — — — —, a polysyllable before it is carefully avoided (— — — — — | — — — — —); but if the ending is | — — — — —, the polysyllable before it is not so rare as in later poets.

3. In Lucretius (III, containing 1,092 verses) we find :

Caesurae after fifth arsis (1) with conflict 2

(2) without conflict (a) monosyl. 58

(b) elision (a) dissyl. 17

(β) polysyl. 13 88

Caesurae in sixth foot (1) with conflict 40

(2) without conflict (a) monosyllables 22

(b) elision 0 22

Conflicts in fifth without caesura (1) | — — — — — | — 2

(2) — — — — — | — — — — — (-que) 7

(3) — — — — — | — — — — — 4 13

Spondees in fifth place 7

Both feet in one word 51

From which we see (1) that conflict in the fifth foot is more carefully avoided than in Lucilius. These conflicts, however, are more rare in Book III than in the rest, which have *four* or *five* apiece. (2) In the *sixth* foot, however, accent is disregarded as much as in Lucilius. (3) Words containing both feet are not avoided, and accent on a short syllable is disregarded, so that the form — — — — — suffers elision four times in the fifth place. These words, however, are all infinitives of verbs compounded with prepositions, and are placed so that the ictus falls on the emphasized preposition, as "*dēfluere hilum*." (This happens, also, in iambs. See *Transactions*, 1876.) Similarly an unusual accent is neglected; for such forms as "*mutareque*" receive the fifth

ictus on the antepenult seven times, although the (artificial) accent is on the penult. Not a few, however, deny that *-que* creates this accent. (This subject is also discussed in *Transactions*, 1876, and comes up again in this paper.) Elision is carefully avoided before a monosyllable at the end of a verse, although it would prevent conflict. It was, no doubt, avoided on account of its roughness. It is not rare in Ennius, and Lucilius has some abominable instances of it, as “*consciū sum mi; at*”—. In the fifth foot, however, Lucretius admits elision in order to prevent conflict; for before caesura in that foot we find the form  $\sim$  — | only *twice*, and  $\sim$  —’ *thirteen* times. Even this elision was too harsh for Virgil and his contemporaries.

4. Corssen, to establish his theory that accent was entirely ignored, counted the conflicts in *Lucr. II*, where he found *sixteen* (in the fifth foot), of which *twelve* were conflicts with the unusual accent on a short penult caused by *-que*, as in “*arbūstaque lēnta*”; and from this he jumped to the conclusion that accent was entirely disregarded. If he had merely asserted that the phenomena, whatever they might prove to be, were due to other causes, there would have been no need of making the count. Hence, as he made the count, he certainly meant to conclude from it whether accent was regarded or not. What, then, did he demand? That *all* ictuses in those feet should fall on accents? By his reasoning we can prove that Virgil did not avoid hiatus (cf. *Aen. XII*, 31, 535, 648, etc.), and that he regarded final short syllables as common (*XII*, 13, 68, 263, 550, 667, 772, 883, etc.). But it is useless to reply to such arguments. The very fact that conflict is so much rarer in Lucretius than Ennius shows that this rareness is not due entirely to accident.

In *Horace Sat. I*, Corssen finds eleven (11) conflicts in the fifth foot and fifty-five (55) in the sixth and compares them with those in Virgil to show that the strictness of the latter was not due to his following popular usage, that is, due to his observing accent. Of course not; but what *was* it due to? “*Legibus aestheticis*,” says Lucian Müller. Very good: but what do *they* relate to? The truth is, Horace wrote his

Satires carelessly,—much more so than his Epistles, and consequently we find not only numerous conflicts of the sort, but also frequent neglect of main caesura, and other licenses.

From Hor. Sat. I, containing 1,025 verses, we collect the following:

Caesurae after fifth arsis (1) with conflict	43
(2) without conflict (a) monosyl.	114
(b) elision (a) dissyl.	14
(β) polysyl.	3 131
Caesurae in sixth foot (1) with conflict	61
(2) without conflict (a) monosyl.	58
(b) elision (a) dissyl.	4
(β) polysyl.	0 62
Conflicts in fifth foot without caesura	21
“ “ sixth “ by synaphea	2
Spondees in fifth place, absolutely	0

Whence it appears that in the Satires, Horace, in comparison with Ennius, guarded somewhat against conflict in the fifth foot, and much more than Ennius in the sixth. The number of caesurae *without* conflict in this foot is the same as that *with* conflict, but if it were left to chance the number with conflict would be as much more numerous than those without, as there are more polysyllabic than monosyllabic words. But if he avoided them at all, why did he make *any* conflicts? Simply because this is not an absolute law, and there was no necessity to observe it strictly, and it would have cost more labor than it was deemed worth.

Horace's Epistles, being written more as monuments of literary art, were more carefully composed than the Satires. In Ep. I, and part of II, making 1,000 verses, we find:

Caesurae after fifth arsis (1) with conflict	19
(2) without conflict (a) monosyl.	70
(b) elision (a) dissyl.	0
(β) polysyl.	2 72
Caesurae in sixth foot (1) with conflict	36
(2) without conflict (a) monosyl.	49
(b) elision (a) dissyl.	1
(β) polysyl.	1 51





The caesurae themselves, *without* conflict, are rare in Virgil. Langen says they would not be rare in the fifth foot if they were allowed after polysyllabic words of each metrical form as frequently as they are after monosyllables. But then polysyllabic words of each form are not so numerous anywhere as monosyllables; and, moreover, earlier poets have the caesura more frequently even after monosyllables. Wherefore we must concede that Virgil avoided the caesurae themselves to some extent, but the conflicts still more. Of this presently.

If enclitics cause accent to fall on a short ultima, as “promissáque (a question discussed in *Transactions*, 1876), it is clear that Virgil disregarded such accents as being unusual, or rather, artificial; for in such cases the conflict is more frequent than in any other. It is true, ictus cannot fall on a short syllable, and such words compelled conflict. But the word-foot — ◡ ◡ ◡ suffers elision seventeen (17) times in the fifth place, causing conflict, and of these instances *sixteen* have *-que*, as “*omniaque* in se,” the only other being “*intremere omnes*,” which is like the examples in Lucretius (prepositions in composition receiving ictus). That such words *have* to suffer elision proves nothing, for the same is true of words of this form *without* an enclitic. Nor is it necessary to assume that the original accent remained, as “*ómniáque*” (like *πῆμαρὰ γέ*); but the true explanation seems to be this. *First*, the roughness of elision at that place (as we shall see hereafter) was avoided; but *-que*, *-ve*, and *-ne* suffer *total* elision (while other words do not), and so cause no roughness. *Secondly*, in these forms the ictus does not fall on a syllable adjacent to the accent, while in other cases it does (cf. *omniaque* = ◡ ◡ ◡ (◡) and *colligere* = ◡ ◡ ◡ (◡)). And might it not be, after all, that a sort of secondary accent did remain on the original tone syllable?

6. The difference between Virgil and Horace in respect to conflict is due to the fact that their works are of different natures. Horace's Satires were written to effect something at the time,—were practical and *objective*; whilst the works of Virgil were designed to be permanent literary monuments,

or works of art. No one expects a *dépôt*-building to be like a memorial hall. The one is a means or an instrument to accomplish an end; the other is its own end. The one is useful, the other ornamental. But the success of an instrument may make it as great an object of admiration as a monument, and the useful may also be ornamental. The fact, however, of a work being in verse at all, makes it to a certain extent a work of art. Lucretius is *didactic*, but he could have taught better in prose. Hence his writing verse at all required that he should make his verse at least endurable, and if possible, attractive. Horace's *Satires* were attacks upon the follies of men, but had to be made readable. His *Epistles* had a less definite immediate object, were more nearly a pure work of art, and so had to be more readable. The *Georgics* of Virgil are somewhat didactic, but more monumental. His *Bucolics* (which have a lyric tone) and his *Aeneid* are purely monumental.

The *Elegy* also is artificial or monumental. Hence in the *Elegies* of Catullus conflicts are rare, in Tibullus and Propertius still rarer, and in Ovid they almost vanish. As far as *Elegies* seem to be *practical* (e. g., the love-poems of Tibullus and Propertius), their effectiveness depended in great measure on their perfection as works of art. Besides, they were written to be published, and in the case of Propertius the *real* name (Hostia) cannot be substituted for the fictitious (Cynthia) without creating frequent hiatus and false quantity. Hence he probably wrote *only* for publication.

(a) In the 323 hexameters of Catullus's *Elegies* there are:

Caesurae after fifth arsis (1) with conflict,	5
(2) without conflict,	18
Caesurae in sixth foot (1) with conflict,	6
(2) without conflict,	7

One conflict (cxv, 5) is caused by synaphea.

In his Heroic poem (*Epithal. Pel.*) Catullus, though perhaps the best of Roman poets, allowed himself to imitate Alexandrian models, and admitted many Greek peculiarities, such as fifth spondees (See Cic. Att. vii, 2). In that poem there

are eight conflicts in the fifth foot, always caused by "hymenaeus," or some other Greek word, or a proper name. In the sixth foot there is one discord with caesura, and one with synaphea. But there are only three monosyllables before fifth caesura, and none before sixth.

(b) In the 855 hexameters of Tibullus I find :

Caesurae after fifth arsis (1) with conflict,	6
(2) without conflict,	17
Caesurae in sixth foot (1) with conflict,	0
(2) without conflict,	3

In Books III and IV, which were composed with more art than inspiration by some late versifier, I find no discord at all. In the 211 verses of "Messala," a silly Heroic poem by an unknown stupid poetaster, there are six conflicts in the fifth foot, and only three caesurae with a monosyllable.

(c) In the 1,572 hexameters of Propertius, there are :

Caesurae after fifth arsis (1) with conflict,	4
(2) without conflict,	18
Caesurae in sixth foot (1) with conflict,	1
(2) without conflict,	27
Conflicts in fifth foot caused by <i>-que</i> ,	2
Spondees in fifth place,	5

(d) In 500 hexameters of Ovid's *Heroides*, and the same number from the *Metamorphoses*, I find :

	Elegiac.	Heroic.
Caesurae after fifth arsis (1) with conflict,	0	1
(2) without conflict,	5	1
Caesurae in sixth foot (1) with conflict,	0	0
(2) without conflict,	1	2
Conflicts caused by <i>-que</i> ,	5	4
Spondees in fifth place,	1	0

From all this it is evident that in this artificial sort of poetry great care was used. Propertius does not appear to have avoided caesura itself, without conflict, as much as the other Elegists.

7. In order to give a better comparative view of the poets examined, I have reduced the more essential points to a uniform scale of 1,000 verses :

	Ennius.	Lucll.	Lucret.	Hor. Sat.	Hor. Ep.	Virg.	Ov. Met.	Caenl. El.	Tibul. El.	Propert. El.	Ov. El.
Caesurae after fifth arsis.											
(1) With conflict, . . . .	52	10	4	42	19	4	2	15	7	3	0
(2) Without conflict, . . . .	77	66	80	128	72	14	2	54	21	12	10
Caesurae in sixth foot.											
(1) With conflict, . . . .	74	36	36	58	36	4	0	18	0	0	0
(2) Without conflict, . . . .	9	25	20	59	51	11	4	21	4	18	2

The number (4) for conflict in fifth foot in Lucretius is not taken from Book III, but from the reading of several books. The result for Ovid is from too small a number of verses to show anything more than that the conflicts and caesurae are extremely rare. The average for all his works would no doubt be different. Thus, in Virg. Aen. II there are *no* conflicts in the fifth foot, whereas the average for all his works is four in 1,000 verses. This shows also that where things are very rare, mere accident may affect them considerably. I should say, therefore, that there is no appreciable difference between Ovid's Met. and his Elegies in respect to conflict, but that both of them differ widely from Horace's Satires.

Virgil admitted the fifth and sixth caesurae, whether with or without conflict, much more rarely than his predecessors; and he carefully avoided an ionic word-foot at the end preceded by a monosyllable, | ˊ | ˘ ˘ ˊ ˘. This ending occurs only five (5) times, and in each instance the last word is a proper name, while ˘ ˊ | ˘ ˘ ˊ ˘ *with conflict* is much more frequent. Hermann (Elem. p. 344, Epit. § 322) says that the cause lay, not in the last word, but in the preceding one, it being unpleasant to have ictus on the unaccented ultima. But then, why the still greater aversion to a *monosyllable* in that position? Hermann thinks that the effort to secure coincidence in the last two verses was because the lungs were exhausted, and so a smooth ending desirable. One might say that when the lungs are exhausted, the ictus must be weaker, and so the conflict would be *less* objectionable, and in support of this, the iambic trimeter might be

cited. The true explanation of the above-mentioned phenomenon seems to be this. In the first place, for reasons already stated, conflict in the fifth foot was to be avoided, and this could be done, if there was caesura, by placing a monosyllable before it; and then this monosyllable forbade a long word being placed after it. Virgil preferred even conflict with two polysyllables together, to harmony with a monosyllable and polysyllable combined. This is perfectly evident from the following exhibit:

$\overline{\text{—}} \text{ ' } | \overline{\text{—}} \text{ ' } \text{—} \quad 41, | \text{ ' } | \text{—} \text{—} \text{ ' } \text{—} \quad 5 \text{ (proper names).}$   
 $\overline{\text{—}} \text{ ' } | \text{—} \text{—} | \text{ ' } \text{—} \quad 14, | \text{ ' } | \text{—} \text{—} | \text{ ' } \text{—} \quad 130$

That is, the tendency to use polysyllables with long words and monosyllables with short ones, as compared with the converse is as seventy-six to one, and that, too, in spite of the tendency to avoid conflict. Similarly in

Horace Sat. I, we find  $| \text{ ' } | \text{—} \text{—} \text{ ' } \text{—} \quad 8, | \text{ ' } | \text{—} \text{—} | \text{ ' } \text{—} \quad 78$   
 and in Ep. I,  $| \text{ ' } | \text{—} \text{—} \text{ ' } \text{—} \quad 2, | \text{ ' } | \text{—} \text{—} | \text{ ' } \text{—} \quad 49$

Why some poets found  $| \text{ ' } | \text{—} \text{—} \text{ ' } \text{—}$  more unpleasant than other poets did, it would be idle to inquire.

§ 3. I shall now make a few observations on special points.

1. Spondaic verses generally end in a proper name of the form  $\text{—} \text{—} \text{ ' } \text{—}$ . The ending  $\text{—} \text{—} | \text{ ' } \text{—}$ , although the coincidence of ictus with accent is perfect, was not employed. This is because there was rarely occasion to use a double name, as "Gaius Gracchus." If, again, the name consists of three long syllables, it creates conflict in the fifth foot, and if it is two long syllables it can be put in the sixth place. Hence only  $\text{ ' } \text{—} \text{—} \text{ ' } \text{—}$  is left. Of course exceptions, such as  $| \text{ ' } | \text{—} \text{—} \text{—}$ , occur.

2. A word of special importance is frequently reserved for the end of the verse. If such a word is monosyllabic it naturally creates conflict; that is, in my opinion the poets placed such words at the end, not always *because* they were monosyllables, but frequently *although* they were monosyllables; as

parturiunt montes, nascetur ridiculus mus.

This verse, I am aware, is often cited to illustrate *surprise*

caused by a final monosyllable. That the monosyllable is sometimes so employed I do not deny, but in this case the sense of "*ridiculus*" prevents surprise in "*mus*." If the verse were

parturiunt montes, nascetur *magnificus* mus,

there might be surprise, though in this instance irony would be suspected as soon as the adjective was read. In order to create surprise we should have to read the verse

parturiunt montes, nascetur—*ridiculus* mus.

And similarly in "procubuit viridique in litore conspicitur—*sus*," there is no more surprise than there is in

"quantum lenta solent inter viburna—*cupressi*."

But if a surprise *is* to be caused, the monosyllable is well adapted to this place; for every one feels that, being an emphatic word and having accent, it is not to be read like an ordinary thesis, and consequently it gives the verse a novel ending; as

dat latus, insequitur cumulo praeruptus aquae mōns.

In such cases I suspect that the Romans unconsciously made an entire foot of the sixth arsis, and placed a seventh ictus on the monosyllable, thus: aquae mōns =  $\cup \text{ } \text{ } \text{ } \text{ } \text{ } \text{ } \wedge$ . This would be a heptameter; but the ancients made a similar blunder in regard to the so-called pentameter (which is a hexameter).

3. When two verses have too close a connection to admit a pause between them, a monosyllable is frequently placed at the end to prevent the voice from falling and destroying the sense. Hermann (Elem. p. 342) teaches that when there is a pause near the end, this monosyllable causes a sufficient prolongation of what follows the pause, to make it "comparable" to what precedes, as

at Boreae de parte trucidis cum fulminat, *et cum*, etc.

But who will prolong "et cum" so that "apte ad praecedentia comparari possit"? It seems to me that the accent on "cum" (or if it has none, then its proclitic character) prevents a

cadence of the voice which would mar the sense; and this close connection with the next verse is most likely to exist just when there is a pause near the end, but when the close connection does exist *without such pause*, the monosyllable is still employed, as,

his me consolator victurum suavius ac si  
quaestor avos pater atque meus patruusque fuisset.

For such instances Hermann's explanation is unavailing, while the explanation just given accounts for all alike. Horace in his Satires very often closely connects two verses in this way, whether there is a pause near the end of the first, or not; as, Book I, Sat. I, 17, 46, 50, 56, 69, 81, 82, 96, 101, etc. This is one thing which contributes materially to the large number of sixth caesurae in Horace. Lucian Müller (De Met. Hor. p. 61), speaking of monosyllabic *prepositions* and *conjunctions* at the ends of verses, says: "mitigatur haec inelegantia addita, quod saepius fit, elisione." In my original dissertation I criticized his statement as referring to *all* monosyllables, and so far did him unintentional injustice. His remark applied also to main caesura after such monosyllables, and in that it is strictly correct; but there is so great an aversion to elision in the sixth foot that such elisions as those mentioned by Müller, as,

naturae fines viventi, iugera centum an, etc.,

are not at all frequent. I have counted such cases as this and "porro et," and find that no greater proportion of such monosyllables, when final, have elision, than when found elsewhere in the verse; and as to final monosyllables generally, the comparison is so striking that I give it:

In all Virgil, without elision, 48, with elision, 2 (atqu').

" Hor. Sat. I, " " 58, " " 4

" " Epist. I, " " 49, " " 1

§ 4. I now proceed to reply briefly to the arguments of those who deny that accent has any influence.

1. As conflict grew rarer in the sixth foot, the caesura even without conflict also grew rarer, but not to the same degree. "Why, though, did it grow rarer at all, if the offense lay in the

conflict?" We answer: Because there *was* a sort of conflict; for the monosyllable at the end has an accent which interferes with the cadence, which is objectionable unless the two verses are so closely connected as to make it desirable (See also end of 3 below).

2. "Conflict with caesura in the sixth foot might be prevented by elision, as in "*decórum* et," and yet this elision is very rare, occurring only twice in Virgil." To this we reply that elision in this place gave the verse so rough a termination that the offense was greater than that of conflict. This is shown by the fact that of the fifty (50) endings of the form | ˘ | ˉ in Virgil, only two have elision ("atque" each time, where the elision is total and hence not unpleasant), and in these fifty cases there can be no question of conflict at all. But if the elision was objectionable between two monosyllables, how much more so between a long word and a monosyllable.

3. Lucian Müller attributes the rareness of fifth caesura after polysyllables to "*esthetic laws*," whatever they may be. But be they what they may, if they are *laws*, they must refer to something, and this "something" I take to be the relation of ictus to accent. I am willing to admit that the objection was to ictus on a weak ultima, but it is weak because of its relation to accent. Moreover, the unpleasantness was merely a result of contrary usage, and that usage excluded fifth ictus from the ultima just as much as it included coincidence of ictus with accent.

"*But when the ictus falls on a monosyllable there is no conflict, and still this is rare in the most careful writers.*" This objection is not exactly true. There is a species of conflict when the monosyllable is followed by another, or by ˘ ˉ, thus, | ˘ | ˘ ˉ | ˘ ˉ, as the ictus is immediately followed by an accent (the case when it is followed by a long word, | ˘ | ˘ ˉ ˘ ˉ, has been already explained). The ending | ˘ | ˘ ˉ ˘ | ˉ creates conflict also in the sixth foot. And further, in avoiding conflict the poets no doubt would unconsciously avoid that which causes conflict—namely, caesura.

4. "But the monosyllable under the fifth ictus sometimes is a proclitic, and so has no accent." This is true. Out of



the hundred and thirty (130) verses in Virgil which end in | ˘ | ˘ ˘ | ˘ ˘, six (6) have prepositions in the fifth arsis, as “*ab Jove summo*,” to say nothing of the seven (7) which have “*non*,” and the eight (8) which have the relative pronoun, and the many others which have monosyllables regarded as proclitics by the grammarians. But as we have better means of discussing the prepositions, I shall confine myself to them, and the conclusion will apply to other words. I cannot agree with those who, in their eagerness to maintain the influence of accent, deny that prepositions were proclitic. Quintillian says (I, 5, 25) that in “*circum litora*” and in “*ab oris*” there is but one accent. He cannot mean *ictus*, for there are two on “*circum litora*” (and, by the way, his statement proves that the ancients observed both ictus and accent in reading—if it needed any proof). This being our best authority, I need not cite others. Among other evidences, however, I may mention that in inscriptions of all periods of antiquity, prepositions are found joined into one word with their objects (Corss. II, p. 863, etc.). So “*antidhac*,” “*postidhac*” are results of the proclitic nature of prepositions before they lost final -d. The analogy of Greek prepositions (if that is of any value) supports this view. Some of them, *ἐν*, *ἐκ*, etc., are confessedly proclitic, and inscriptions show close union with their objects by euphonic modifications in the case of other prepositions, and when they lose their vowel, no accent is written; so that the written accent (as in *παρὰ τοὺς τοὺς*) must have been very slight, though in other parts of speech Dion. Hal. (*De Comp. Verb. C.* XI) implies that it was a “*ράσις ὀξεῖα*.” In view of all this I must assume that prepositions had no accent. I have also made a careful computation, and find that monosyllabic prepositions are placed under the fifth arsis about as often, in proportion to their entire number, as words are which have an accent. But after all, this is not surprising. The monosyllable, though unaccented, prevents the ictus from falling on a weak ultima; and though it has not the musical elevation belonging to accent, it *has* the stress belonging to the ictus, as it is an independent word; so that the difference between “*ab Jove*” and “*armaque*” is not great,

the latter having the root-stress on “*ar-*”. The same explanation applies when a trochaic proclitic receives the fifth ictus, as “*propter eundem*,” “*unde Latinum*.” But this union of a proclitic with the next word is not entirely so close as that between two syllables of the same word, as is shown by such endings as “*inter eundem*,” which are numerous, while by the more elegant poets a single word like “*ingemuerunt*” is avoided in this position. Moreover, the caesura may fall between a preposition and its object, as :

et inde tot per | impotentia freta;

unless we try to believe that in this iambic trimeter alone Catullus neglected caesura. Other examples occur in other poets.

Here I close. It would be impossible to sum up all the conclusions in a brief space. I wish merely to repeat and emphasize the statement that the influence of accent in dactylic hexameters was a result of usage, and not of an original aversion to conflict between it and ictus; and that this very conflict, which got to be unpleasant in the last two feet, was quite agreeable in the first few feet of the verse.

#### IV.—*Observations on Plato's Cratylus.*

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The student of the science of language who wishes to take a comprehensive view of the theories advanced regarding it, cannot fail to take cognizance of Plato's writings as the earliest detailed embodiment of speculation and observation on this subject. Not but that among the predecessors of Plato and Socrates valuable suggestions on the nature of language were offered, but they were isolated flashes across the field of intellectual vision rather than systematic discussions; neither Herakleitos nor Parmenides formulated their inquiries in a manner calculated to emphasize distinctly the difference between thought and speech. Strange though it may seem, the Greek philosophers busied themselves considerably with hypotheses on the origin of the reasoning faculties, before they convinced themselves that the final results of such investigations must, of necessity, be futile, unless they attacked the problem of the origin of language, since language was the vehicle of reasoning, and thus the most essential characteristic of human kind. Plato's age was fully alive to this inquiry, and in the *Cratylus* we have by no means a tentative effort in this field of speculation, but a *résumé* of prevalent theories which a master in the art of dialectics sifts, indorses, modifies, or rejects. The very art of the writer, however, his consummate use of the various devices of oratory, satire, modest doubt, etc., have rendered a correct appreciation of his position all the more difficult, as we lack almost completely the evidence for the real opinions held by those philosophers whose views he introduces as foils for his argument.

Hence various modern writers on comparative philology have been able to interpret the position of Plato in consistency with their favorite theories, and the *Cratylus* has been represented as the precursor of those linguistic treatises that proclaim the study of language a physical science as well as of those that make it a historical science. One point we may lay down

even at this stage: Plato's *Cratylus*, whatever its object or tendency, cannot be disregarded in any discussion on the science of language; it forms the landmark around which the speculations of the ancients on the subject may be grouped. From Herder on through Schleiermacher, Ast, Steinbart, Benfey, Müller, Whitney, Steinthal, Geiger, down to the most recent expositor of these issues, Ludwig Noiré (*Ursprung der Sprache*), all seek to establish their relation to the Platonic dialogue; nay, the last-named philosopher, whose estimation of his own results is significantly presented in the sentence: "Thus language *must* have arisen; it *cannot* have arisen otherwise," finds in Plato's exposition the germs of most advanced modern thought, as of Schopenhauer, and a series of linguistic and philosophical discoveries that thenceforward became an heir-loom to all later speculative research. Now, notwithstanding the discrepancy of opinion as to the ulterior significance of the dialogue, it is a fair question, Are there not a number of points, generally adopted by all commentators, from which a consistent interpretation ought to be possible? A review of the various discussions on the *Cratylus*, casually undertaken by me, has convinced me that opinions are still almost hopelessly divergent on the problem proposed in the dialogue, and that yet there have appeared two discussions that merit a more thorough consideration than they have received for their bearing upon the main issue; I refer to Benfey's "Ueber die Aufgabe des Platonischen Dialogs *Cratylus*," and Dr. Herm. Schmidt's "Plato's *Cratylus*, im Zusammenhange dargestellt." The reasons for this neglect seem to me to constitute a special plea in their favor; neither of them seeks to establish a relationship between the *Cratylus* and the general system of Platonic philosophy. I urge this as a point in their favor, for the much-vexed question of the Platonic philosophy, with its numerous subsidiary issues, is too apt to bias the judgment on the import of the single dialogue; and it seems to me incompatible with the nature and purposes of these dialogues, that they should all represent one and the same line of thought, uninfluenced by the exigencies of a conversational exposition. Two circumstances that have, respec-

tively, been prejudicial to these essays in the eyes of the German philological world will not influence our estimate of them. Dr. Schmidt's essay does not present a connected theory of the meaning of the *Cratylus*, but analytically takes up the various passages, and, disregarding the final result, discusses fairly and acutely the interpretation which is presumably the best. Whilst Schmidt then has no special theory to advance, Benfey, who *does* look to the claims of the work as a philosophic whole, too modestly pleads ignorance as a metaphysician, and as an exponent of Platonic phraseology. Here, then, has been found the vulnerable point by the specialist-critics; and though it must be admitted that now and then there occurs an impossible rendering of some minor passage in the Greek, his sound qualities as a linguist more than compensate for this deficiency.

To those parts of Schmidt's work that do not tend to elucidate the questions which Benfey has also treated, nothing more than a passing notice can be given; let it suffice that many a passage, involving knotty, grammatical construction, has been capitally set forth by Schmidt. On the main issues of the dialogue, Plato's opinion of the origin and formation of language, the contributions of the two writers seem to me specially valuable.

In this direction Benfey has developed in succinct argument a point that is particularly timely just now, when other German critics, like Schaarschmidt and Krohn, apply the crucial test to every one of the dialogues, and attempt to deny the Platonic origin of the majority. If Plato is not the author, he argues, it would remain for Schaarschmidt to prove that the dialogue is of much later origin, the product of a time, when the study of language was more thoroughly developed, say, the Aristotelian; and as this can never be done, the inherent excellence of the treatise as the oldest comprehensive work on the subject of linguistics remains unimpaired; the question of Plato's authorship is, under all circumstances, secondary to the internal consistency of the views expressed. Let it not be supposed that the treatment of this question of authenticity is a purely speculative one. Schaarschmidt's

criticisms on so-called inconsistencies in the Cratylus must stand or fall, in several instances, with the accuracy of translation in a given passage. Thus, when he ascribes to the author of the Cratylus the assertion that in a sentence each word embodies a judgment upon an object, and that, if a statement is false, every single word contained in it must also be false, a careful study of the previous passage would have led to a more rational conclusion. With Schaarschmidt, many others err in trying to ascertain what they call "den verhüllten Sinn"; this license once granted, the way is open to various mystifying interpretations, and the natural course of reasoning may as well be abandoned. No more striking instance of this warping of the logical faculties could be found than Steinthal's exposition of the object of this dialogue in his "Geschichte der Sprachwiss. bei den Griechen und Römern." "The first part of the dialogue, where Plato proves that a name is the sound-complement of the fundamental idea of the name (die Ausführung der Idee des Namens im Laute), and supports the view with the greatest sincerity (mit seinem Herzblute)," all this serious exposition we are, according to Steinthal, to regard as not serious, and in the famous second or etymological part whatever is sportive, conceals under it the reverse of sportive observation, is, in fact, exceedingly sober. Now, whither will such methods of interpretation lead, if, without any clue in the writings before us, such renderings are possible? But why are such *tours de force* ascribed to Plato? Because, though anxious to establish a science of etymology, he has so little confidence in the correctness of his derivations that he finds it safest to ridicule them all, good, bad, and indifferent. Stranger still, however, is it that these philosophical critics have generally failed to observe carefully the exact meaning of the technical terms used; and it is peculiarly meritorious that Benfey has established these conceptions beyond a doubt.

The question whether Plato considered language to have originated and developed φύσει or θέσει, for which latter word εὐνόμη is frequently used in the Cratylus, could not be answered satisfactorily, so long as it was not definitely under-

stood that *ξυρθήκη* has varying technical and popular significations. Benfey has carefully discriminated its three respective significations, as (1) "an arbitrary agreement, unlimited in every respect, perfectly optional," (2) "the agreement or accord of a number of persons, bound by natural ties," and (3) "such agreement as has become conventional," and we recognize the vast difference between the *ξυρθήκη* or accord of society, by means of which the originally manifest meaning of a word is retained, notwithstanding the changes and modifications in etymological value, and that arbitrary *ξυρθήκη* which *e.g.* decides upon certain sound-combinations as proper designations of various numerals. Jowett recognizes the difficulty, and in his latest edition renders it often by "convention and agreement." Plato's time is preëminently the period of transition to a special philosophical terminology, and works in which this process of evolution is being perfected, require a more faithful interpretation than others with a fixed technical vocabulary. In deciding these questions, the aid of kindred sciences is often very desirable, and that were an unworthy sense of exclusiveness that would forego the information likely to be attained from such a source. Not unconsciously, however, is this evolution of terms brought about. Plato's tendency toward nice distinctions appears, for instance, from a survey of the verbs he employs in the sense of "to mean"; and one cannot fail to notice with what consideration for the requisite shade of meaning he employs *ροεῖν*, *ἡγεῖσθαι*, *λέγειν*, *ὀνομάζειν*, *καλεῖσθαι*, *εἶναι*, *βούλεσθαι*, *δηλοῦν*, *μηνῦναι*, *σημαίνειν*, *ἀπεικάζειν*, *μμεῖσθαι*, *φαίνεσθαι* *ἀπείκασμα*, *ἔοικεν*. A similar definite conception of Plato's leading terms seems to me an absolute necessity, where he himself has not made matters as plain as in the instance just quoted; *ὄνομα* and *ῥῆμα* are the veriest by-words of the dialogue, and yet the translations given by Schleiermacher, Steinhart-Müller, and others are ambiguous, since they are confused by the later application of the word by grammarians, with whom *ὄνομα* = noun, *ῥῆμα* = verb. That *ὄνομα* here means "word" in its wider sense, and not the noun-forms merely, is of no slight importance in the consideration of the main question, for, if we admit that the verbs

are also *ὀνόματα* (and this has, I believe, been unhesitatingly conceded to Benfey), we are forced to admit that *ῥήματα* can no longer be rendered, as all translators have done, by "verb," that the phrase *ὀνόματα καὶ ῥήματα* would be tautological, and that *ῥήμα* must indicate an intermediate stage between the "word" and the "sentence" in a logical and grammatical sense; the logical sense being differentiated from the grammatical in this fashion, that the same word may in turn serve as an *ὄνομα* or *ῥήμα*, according as it is accepted as an appellation, or conceived of as a condensation of a logical phrase. So *βολή* is the *ὄνομα* to *βολή* (shot) as *ῥήμα* and if *βολή* can be analyzed still farther, it becomes the *ὄνομα* to another *ῥήμα*. Benfey contends, and not unfairly, that the later meaning of *ῥήμα* (= verb) comes more naturally from this original application, that the *ῥήμα* contains that part of the sentence which is independently intelligible. Not only is Plato's usage of philosophical terminology often the cause of mistaken conclusions, but the instances are not infrequent where a modern investigator will be oblivious of the development and growth of certain ideas since Plato's time. How else could a distinguished scholar like Steinthal sneer at John Stuart Mill's statement that "words are important for the comprehension of things," and identify this with Cratylus's statement that "a knowledge of the *names* of things involves a knowledge of the things themselves," seeing that Cratylus refers to the original physical nature of words in which he presumes to find a genuine reflection of the objects they refer to, whilst Mill has in mind the logical meaning that has gradually developed out of a word. Benfey and Schmidt, whilst cognizant of such principles as have here been stated, have proceeded to the solution of other difficult questions by throwing upon the words involved the light of comparative grammar.—A link in the argument, so urges Schaarschmidt, is wanting in the celebrated passage (388 B.) where, after speaking of the functions of various instruments, the shuttle, the awl, etc., Socrates recurs to the name as an instrument, and draws analogous conclusions. Let us examine for a moment the text and Jowett's translation, which is no stronger here than any of



the other versions. Socrates asks: *κερκίζοντες δὲ τί δρωμεν; οὐ τὴν κρόκην καὶ τοὺς στίμονας συγκεχυμένους διακρίνομεν;* "What do we do, when we weave? Do we not separate or disengage the warp from the woof?" and shortly afterward, *ὀργάνῳ ὄντι τῷ ὀνόματι ὀνομάζοντες τί ποιούμεν;* Hermogenes: *οὐκ ἔχω λέγειν.* And Socrates: *Ἄρ' οὖν διδάσκομέν τι ἀλλήλους;* "Do we not teach one another something?" Now with such a translation there is an unwarranted transition from *διακρίνομεν* to *διδάσκομεν*. An analysis of the verb *διδάσκω* shows, however, that in its primitive root-form *δα* we have the true signification of *separation* which underlies even the forms *δαίω* "to burn" and *δαίνυμι* "to entertain as guest," and it is in accord with the etymological character of the whole dialogue that Socrates should thus delicately make the logical transition. On the other hand, I do not believe that it will be easy to find *one* word which in the translation would carry the same suggestiveness with it, and yet not transcend the scope of meaning, usually ascribed to *διδάσκειν*. Of the salient points in the dialogue which, stripped of the dialectic form, betoken a substantial knowledge of certain principles, current now among students of comparative grammar, Benfey has made an interesting list, and without giving way to the enthusiasm usually connected with such observations, has also dropped various claims that had been previously made for Plato's linguistic insight. Among these prominent points I single out the following: "that word would be most correct which would contain completely its etymological elements;" again, "words are overlaid by the addition or stripping off or twisting of letters for the sake of euphony"; "onomatopoietic origin of words is to be disregarded almost completely." With the acknowledgment of Plato's grammatical insight must be coupled, however, the warning that whether in sport or ignorance, or from other motives, the illustrations of these principles are in many cases untrustworthy.

Have Benfey and Schmidt, you will probably ask, taken any new position on the central question, that of the purpose of the *Cratylus*? I may as well state that I look upon Benfey's judgment in this question as the most valuable recent contri-

bution to its solution. All preceding commentators, from Proclus to the moderns, have assumed as Plato's purpose the treatment of the question, "Has language, as it exists, come into being *φύσει* or *θέσει*?" and have, with an expenditure of considerable ingenuity maintained the one or other issue. What curious methods of procedure were necessary to make Plato a doctrinarian on either side of this question! That Socrates is represented as finding fault with the views of both Cratylus and Hermogenes, the typical expositors of the two opinions, was undeniable. Now in the one of these critical analyses, Socrates, so say Steinthal and others, does not mean what he says; he criticizes, and yet at heart supports a certain view. Whence this knowledge of the attitude of Socrates? The solution is simple; not from the work itself can such inconsistency be gathered, but from the desire of the modern theorist to confirm his experiences from this ancient product of literature. Others, less metaphysical, find Plato's individual opinion in the golden mean between the opposing views. But for this intervening opinion no statement can be found in the *Cratylus*. On the contrary, the very supporters of this theory confess, as Schleiermacher does, that Plato's language indicates that he cannot give satisfactory account of his opinion; and thus, also, honest doubts as to the cogency of his own opinions seem to have presented themselves to Deuschle in his work "*Die Platonische Sprachphilosophie*" who confesses that to himself it is not clear, how in the concrete application *φύσει* and *θέσει* can correspond respectively to *ἔθος* (custom) and *ἐνθῆκη* (agreement). I cannot understand why a point of primary significance has not been urged as the final answer to these speculative fancies; that the language of Socrates, naturally interpreted, proves him to be opposed to the views of both Cratylus and Hermogenes is indisputable. Again, if Socrates would wish us to accept the reverse of what he says, the language with its facile particles would afford unmistakable proofs of such intentions; why, then, this vacillation instead of a frank confession of the situation?

Neither *φύσει* nor *θέσει* can language, as it exists, be proved

correct; in other words, language, as actually used, neither conforms in its origin and growth to the natural meaning of words, nor to the agreement of mankind regarding them. An ideal language only might be constructed conformably to these principles; in it the veritable *ὀρθότης ὀνομάτων* would have to be sought; whatever correctness of appellation actual language shows forth, is purely accidental, is, as it were, a reflection from the world of ideas; and yet, it is desirable to extract from language, as it exists, whatever traces of systematic development can be definitely established; hence Plato enters as far as possible into an analysis of existing language, and scrutinizes its laws. In seeking for analogies to this method of treatment, Benfey has, strange to say, overlooked that Platonic work which is most strikingly similar in conception and execution, more so than the *Politeia* and *Politikos* that he mentions. I have in mind the *Νόμοι*, a treatise far more comprehensive, it is true, than the *Cratylus*, but equally impelled by the desire to extract an ideal code of laws from the existing and opposite systems, prevailing in Greece. Not for a moment can Plato have assumed that such a code would take effect without extensive modifications and adaptation to the limiting circumstances of time and people, nor, I take it, was that at all his purpose, but rather to evolve from imperfect and contradictory methods something higher and consistent in itself. And such is the case with language.

Under this assumption, however, it must be evident to every student of Plato, that the relation of the second part of the dialogue, the so-called etymological part, must be established with respect to Benfey's theory. Views have diverged widely respecting its importance from Dionysius of Halicarnassus who considers it the cardinal point, as the additional superscription he gives to the dialogue: *περὶ ἐτυμολογίας* proves, to Schleiermacher, who looks upon it as "Nebensache," and with whom many others fail to find any purpose in this exposition. That Steinthal alone had endeavored to fathom this curious mixture of gravity and irony has already been referred to, but his reasoning has been shown to be exceedingly faulty. According to Benfey it is not only no minor part that has

assumed in consequence of Socrates' tendency to ridicule the etymological fashions of the day undue proportions, but it is a legitimate outgrowth and further exposition of the first portion of the work. Ὁρθότης ὀνομάτων he has there defined as existing, when name and object mutually suggest and cover each other. To the practical illustration of this mutual kinship he devotes himself in the second part, but language, as it actually exists, bristles with imperfections, and hence the application of his principles does not result in a consistent series of etymological analyses. Many absurd conceptions obtrude themselves, but it is to be remembered that the sense of the ludicrous is not what he panders to; it is rather the weakness of language, unphilosophical as it needs must be, that Socrates demonstrates in this extensive series of etymologies. The sense of proportion that Plato elsewhere displays so uniformly, could never have permitted him to ignore the limits within which ridicule proves effective; so prominent a part as this second must have served some higher purpose; and if Benfey's efforts had succeeded in establishing this point merely, his treatise on the Cratylus would seem to me a noteworthy performance, worthy of general recognition and study.

## V.—On the Composition of the *Cynegeticus* of Xenophon.

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Xenophon at Scillus, as Diogenes Laertius reports, spent his time in *hunting*, entertaining his friends and writing his histories—διετέλει κυνηγετῶν καὶ τοὺς φίλους ἐστιῶν καὶ τὰς ἱστορίας συγγράφων. Even without this express statement we might safely infer his devotion to the chase from the frequent and loving references to hunting in his larger works. From the *Anabasis* to the *Oeconomicus* no one of his writings is without some allusion to this pastime, or some illustration drawn from it.

In the first book of the *Anabasis* we have a digression upon the chase of the wild ass and the ostrich, and a comparison of the flesh of the ass with that of the partridge, a bird which, as we know from the ancient monuments, was often hunted and shot on the wing in Persia. Cyrus the younger is praised as φιλοθηρότατος καὶ πρὸς τὰ θηρία φιλοκινδυνότατος, and an anecdote is told of his prowess in conflict with a bear. In one of the villages of Armenia the Greeks captured the Komarch's daughter, but her bridegroom was "off hunting hares"—λαγῶς ᾤχετο θηράσων. In the fifth book of the *Anabasis*, Xenophon says in praise of his home at Scillus that there are θήραι πάντων ὅποια ἐστὶν ἀγρενόμενα θηρία.

In the *Memorabilia*, Socrates is represented as often comparing and contrasting the acquisition of friends to the pursuit of game. Friends are not to be taken κατὰ πόδας like hares, nor ἀπ᾽ αἵτης as birds. He tells Theodota that she needs some one to act the part of a hound (ἀντὶ κυνός) for her—to scent out the rich who are susceptible to the charms of beauty and drive them into her nets. In another place he says that men of the best natural endowments need the most careful training, as the best dogs, if neglected, become the worst.

In the *Hellenica* Xenophon mentally smacks his lips as he tells us (IV, 1, 15) of the palace of Pharnabazus, where

Agésilas found such good hunting in the parks and forests. An observation like this we could hardly find in Thucydides.

The writer of the Spartan State remarks the care bestowed on the hunting dogs, and the importance attached to hunting in the education of the Spartan youth.

But it is in the Cyropaedia, where the writer's fancy had free sway, that his love of the chase is most conspicuous. Cyrus as a child fawned on his grandfather like a puppy on his master. On his first great hunt he cried out like a blooded puppy on approaching the game. His first battle was on occasion of a hunt of the Assyrian prince. In the celebrated sixth chapter of the first book, Cambyses directs his son how to take advantage of the enemy by recalling the arts which he had used against the hares and larger game, describing the pursuit undoubtedly much as it was carried on in Greece, just as elsewhere in this romance many Spartan regulations are ascribed to the ideal Persians.

The Armenians were more willing to yield to Cyrus because they had hunted with him years before. Chrysantas urges the other Persians to enroll themselves for the cavalry, that they may be better able to pursue a man or a wild beast. The son of Gobryas lost his life because by his success in the chase he excited the jealousy of the Assyrian crown prince. Finally, as soon as Cyrus was established at Babylon, he appointed masters of the hounds and took his court out to hunt.

Such evidence of devotion to venery prepares us to accept the further statement of Diogenes that Xenophon wrote a treatise on hunting. A tract under that title is found in MSS. of Xenophon's works, and is referred to as his by authors and lexicographers since the early part of the second century of our era. It covers about thirty-three pages of Teubner's text, and is divided into thirteen chapters. The first is introductory; the next describes the nets; the next six chapters describe the dogs and methods of taking the hare; the ninth is devoted to the chase of the deer; the tenth to the wild boar; the eleventh, only a few sections, to lions, leopards, lynxes, panthers, and bears; the twelfth and

thirteenth are a defence of the chase and an attack upon sophists.

The external evidence for the Xenophonticity of this work is strong. We know that Xenophon was devoted to hunting; that he was an eminently practical man; as he wrote treatises on kindred subjects, as horsemanship, he might be expected to write on this subject, and Diogenes Laertius tells us that he did write such a treatise. Arrian of Nicomedeia, who flourished at the beginning of the second century of our era, was not content with writing another *Anabasis* (of Alexander) and a second *Memorabilia* (of Epictetus), but reasserted his right to the name which he bore of *Ξενοφῶν ὁ Ἀθηναῖος* by writing a short *Cynegeticus* as a continuation of the work of the son of Gryllus, on the ground that the elder had not known the Celtic dogs and the Libyan and Scythian horses.

This work of Arrian is in itself most insignificant, but its authenticity has not, to my knowledge, been questioned. It begins with an evident allusion to Xenophon's first chapter—*Ξενοφῶντι τῷ Γρύλλου λέλεκται . . . οἱ παιδενθέντες ὑπὸ Χείρωνι τὴν παιδείαν ταύτην ὅπως θεοφιλεῖς τε ἦσαν καὶ ἔντιμοι κατὰ τὴν Ἑλλάδα*. Thro the whole work also, Arrian refers to the views of his master, occasionally confirming and occasionally correcting them. E. g., he says (IV, 5) that he has no objection to *χαροπὰ ὄμματα*, which Xenophon (III, 23) considers bad. Again, Arrian does not consider a uniform color a fault, while Xenophon calls it *θηριῶδες*.

Aelian, living at the same time as Arrian, says (*de nat. an.* XIII. 24) *Ξενοφῶν δὲ ὑπὲρ κυνῶν λέγει καὶ ταῦτα*—quoting from *Cyn.* IV, 9, and elsewhere refers to this work.

Hermogenes, in the latter half of the same second century, quotes Xenophon's description of the hounds smiling and scowling and doubting. One expression is not a verbal quotation, but the rhetorician was probably quoting from memory.

Athenaeus, Libanius, Pollux, Harpocration, and Suidas also refer to the work, and have words and phrases from it.

The tract presents many peculiarities, so many indeed that there is but a poor basis for conjectural emendation. But Valckenaer is said to have been the first to suspect the author-

ship of the work. In his notes to Euripides's *Hippolytus* (published in 1768) he says: "Xenophon aut quicumque scripsit *Cynegeticon*." Afterwards he seems to have confined his suspicions to the proœmium, in which Schneider agrees with him. L. Dindorf also in the preface to the last critical edition (Oxford, 1866) says that Valckenaer was right in limiting his suspicions to the proœmium and the epilogus, which is no better, "*nam quod in hoc libello et imperativorum formae sunt Macedonicae potius quam Xenophonticae et aliae multae non Atticae, non sufficit ad eripiendum illum Xenophonti, nisi alia accesserint argumenta.*"

Here apparently the case stands to-day. No one claims the authenticity of the introduction, as Bernhardt says in his "*Wissenschaftliche Syntax*," who does not have a mean opinion of Xenophon's understanding; and most agree with Haupt (Opp. I, 195) in saying that the original work must have begun with the last section of the first chapter; but so far as I have seen, critics have, with the exception of introduction and epilogue, affirmed or denied the Xenophonticity of the treatise as a whole, and mainly on general grounds.

There seems indeed much uncertainty in discussing this question in detail. Xenophon spent much of his life out of Attica. If we adopt the view which seems to me most probable, that he was not much more than thirty years of age\* when he went to join Proxenus and Cyrus, he spent most of his life in campaigns in Asia Minor and in Peloponnesus. It is not strange then that Sauppe finds in his writings three hundred and sixteen poetic words, ninety-nine ionic, and sixty-three doric. A large number of these unattic words are in the *Cynegeticus*, but from this alone no inference can be drawn, especially as some allowance may be made for the influence of the subject in introducing unusual words. So those who have rejected other opuscula of Xenophon have based their judgment on the matter or the style, not on the unXenophontic use of words. Thus Boeckh rejected the *Athenian State* because it must have been written during the Peloponnesian war. Later authorities are still more definite. Kirchhoff

\* See the argument by Professor Morris, *Transactions* for 1874.



assigns it to 424 B. C., while Moritz Schmidt and Faltin set it 430–429. Their arguments are based on the allusions to the taxes, to the comedy, and to the naval supremacy of Athens, and they are convincing.

In a work on hunting, however, we do not expect such references to public affairs, and in fact we find in our tract no hint of the kind. Nets are described as used as they were in the Middle Ages (as is shown by the allusions in old German literature), and as we find them pictured on the monuments at Koyunjik. Dogs are described as showing their proximity to the game in the same way as at the present day. Horses and bows are not used, but that seems a peculiarity of place, not of time.

The Xenophontic authorship of the *Agésilæus* has been disputed because of the florid style of the rhetorical encomium, and because, tho Xenophon died at an advanced age only a year or two later than the Spartan king, the work bears few marks of the old age of the writer. Some have assumed the existence of a grandson of Xenophon, of the same name, as the opponent of Deinarchus (this can hardly have been *our* Xenophon, for Deinarchus made his first public speech 336 B. C.), and as the author of the *Agésilæus*, the epilogue of the *Cyropaedia*, the treatise on the Revenues of Athens, and the editor of the *Hellenica* and the *Spartan State*. But there is no reason for assigning the *Cynegeticus* to a younger Xenophon. In fact, the only prominent stilistic peculiarity of the *Agésilæus* and some of the other opuscula is (as Blass says) the immoderate use of *μήν* and *γε μήν* (see *de re equest.*, §§ 4–16: *μήν* thirteen times on two pages); but this particle is not once used in our treatise.

Moreover it is impossible to decide upon the authorship of this work from the statement of Diogenes Laertius that Xenophon wrote *βιβλία πρὸς τὰ τετταράκοντα*, for he immediately adds, *ἄλλων ἄλλως διαιρούντων*. There is no help to a decision from the position of the treatise in the MSS. In the Florentine MS. (53, 21), the only one which contains the *Cynegeticus* with other opuscula, this tract is placed first, and such was its position in the earliest edition (in Latin at Florence, 1504).

The Aldine edition (1525) was the first to place it at the end of the works, where it has since remained.

All these things make it difficult to refute the Xenophontic origin of the work, or any part of it. But on the other hand the authority of Arrian and the rest in support of its authenticity proves too much. Arrian and Libanius referred to and quoted the proëmium, the genuineness of which no one would now claim. We only infer that the work existed in its present form, and was accepted as Xenophon's, at the beginning of the second century after Christ.

Further, the discussion of this question on the ground of the internal evidence of style and constructions is made easier and surer by our having more than eleven hundred pages of Xenophon's writings, the authenticity of which has never been questioned. We are thus able to observe the minute details of his style as well as the general features which are set forth by Hermogenes (Spengel, *Rhet. Gr.* II, 418): "Ἔστι τοίνυν οὗτος ἀφελὴς μὲν ὅτι μάλιστα . . . . καθαρὸς δὲ καὶ εὐκρινής, εἴπερ τις ἔτερος, ὁ Ξενοφῶν. His constructions are simple. He avoids all involved sentences, as he does all abstruse thought.

But we have not merely voluminous writings of Xenophon, but works of every period of his life, and on various subjects, from the *Memorabilia* and *Anabasis*, written soon after his return from service with Agesilaus in Asia Minor, to the *Cyropaedia*, *Hellenica*, and treatise on the Revenues of Athens, which occupied his later years. We are almost admitted to his study. We see how ready he is to use a second time, in almost the same language, a good thought. We see how several experiences of his own and sayings of Socrates are combined to form incidents and speeches in his romance, the *Cyropaedia*.

Cyrus the Great, before Babylon, is made to extricate his forces from a difficult position by the device which Agesilaus used before Mantinea (*Hell.* VI, 5, 18). Cyrus the elder gains the affections of his subordinates by the same attentions as Cyrus the younger. The same thoughts on the Delphic motto, *Γινώθι σαυτὸν* are found in the *Memorabilia*, in the dialogue between Socrates and the beautiful Enthydemus, and in the

Cyropaedia in the conversation between Croesus and Cyrus. These books contain the same warnings to young officers that a knowledge of tactics is a small part of military science; the same remarks on the gradual change of the seasons; the same views of prayer and the gods' unwearied care for men, of ingratitude, of οὐ δοκεῖν ἀλλ' εἶναι; the same thoughts on catching hares. The list might be indefinitely extended, and all these examples are in language so similar as to show the identity at a glance. It would be easy to show a similar connection between Xenophon's other works.

If then Xenophon writes a treatise on a subject to which, as was shown at the beginning of the paper, he has referred so often, and especially in the *Cyropaedia*, like this, one of his later works, we should expect to find many of the same thoughts, in the same style, and not infrequently in the same words. The objection that the subject excuses unusual words and style in this point of view has less weight. I find but two passages (VI, 26 and VII, 11) which could be considered in any sense parallel to anything that we find in the other works of our author. These are directions to the master to feed the dogs himself whenever it is possible, and to rub down the dogs before leaving the hunting-ground. Similar advice is given in regard to horses in the treatise *Περὶ ἵππων*.

As regards words, I may say that we are surprised to find here so few hunting words which had been used in the other works. *θήρατρον, σύνθηρος, συνθηρευτής, πλέγματα, ποδάγραι, ἄρπεδοί, ὁ ἐπὶ τοῖς ἄρκυσι* = ὁ ἄρκυωρός and others, which are found in the *Memorabilia* and *Cyropaedia*, are not met with in this tract.

But I will proceed to notice certain peculiarities of the *Cynegeticus*.

Remarkable is the frequent occurrence of *asyndeta*. Xenophon on occasion uses the asyndeton effectively. Addressing the soldiers after the treachery of Tissaphernes, he speaks of those who trusted the Persians as *παιόμενοι, κεντούμενοι, ὑβριζόμενοι*. In the *Anabasis* v, 2, 14, the soldiers ran together *καὶ τὰ βέλη ὁμοῦ ἐφέμετο, λόγχοι, τοξεύματα, σφενδόνας κτλ.* In other cases there is somewhat less animation, as in *Anab.* vi, 6, 1, where the Greeks at *Κάλπης Λιμῆν* plundered *πυροὺς καὶ κριθάς, οἶνον,*

ῥσπρια, μελίνας, σῦκα. But in all of Xenophon's larger works there are not so many instances of asyndeta as in these thirty-three pages; and no example like Cyn. v. 30, which section is remarkable in many ways, but does not stand alone in this little work. Cf. v, 18, τοὺς λίθους, τὰ ὄρη, τὰ φέλλεια, τὰ εὐσεά. Cf. also vi, 1, Κυνῶν δὲ κόσμος δέραια, ἰμάντες, τελαμωνίαι· ἔστω δὲ τὰ μὲν δέραια μαλακά, πλατεά κτλ. Some passages may easily be emended, as vi, 8, μακρὰ [καὶ] ὑψηλά. Others are in themselves unobjectionable, as perhaps ix, 1 and xi, 1, but taken together they are extraordinarily frequent, and the first mentioned, v, 30, is desperate. There is no rhetorical animation to excuse it, nor a long list of qualities of one object, but the sentence is made obscure by the frequent juxtaposition, without conjunction, of two or three nouns or adjectives.

I notice next the use of prepositions. Professor Tyler says (Transactions for 1873) that thirty-six per cent. of Xenophon's verbs are compounded with prepositions. Beginning with i, 18, the part of the work most Xenophontic in character, we find that thirty-seven per cent. of the verbs in the first nine sections are compounded with prepositions; while in chapter v. we find that fifty-seven of the first hundred verbs are so compounded. This can hardly be mere chance, especially as many of these compound verbs do not differ sensibly in meaning from the simple. Thus εὖδῃ and καθεύδῃ, κινεῖ and ὑποκινεῖ are used in parallel passages; ἐπιγνωρίζω like γνωρίζω; ὑπάγω like ἄγω.

This of course points clearly to a later origin for the passages in which the unusual number of compounds is found.

Further. On the twenty-seven pages which are devoted to the treatise proper, excluding the proëmium and epilogue, there are twenty-one verbs which are compounded with two or more prepositions, thirteen of the twenty-one being on the ten pages which begin with chapter iii. The last twenty-seven pages of the seventh book of the Cyropaedia, which I took up at random, have but one verb so compounded. Other passages have more, but that the large number here is not due to chance or the nature of the subject, is obvious from a glance at some of the verbs; ἐγκαταπλέκω being equal to ἐμπλέκω, ἐγκαταρράπτω to ἐνράπτω. Compare προδιεξέλθωσι, v, 4. It is

evidently the result of the growing tendency, noticeable e. g. in New Testament Greek, to make the verb more definite by prefixing a new preposition.

Moreover, there are on these twenty-seven pages forty-three cases (thirty-one different verbs) of the repetition of the preposition with which the verb is compounded, before the noun, as ἀπὸ τῶν κυνηγεσίων ἀπαλλάττουσι, ὑπερφορεῖ ὑπὲρ τῶν τοιούτων, and others. In the *Memorabilia*, one hundred and forty-two pages, I have noticed but thirteen examples of this repetition; and of these thirteen, two are in passages suspected by Valckenaer and Dindorf. In the three hundred and thirteen pages of the *Cyropaedia* I noted but fifty-five examples. At this rate the twenty-seven pages of which we are treating should have not more than five, instead of forty-three. This of course may indicate hasty preparation as well as interpolation, but we are hardly prepared to find it in *Xenophon*.

A few instances of irregular constructions with prepositions and verbs compounded with prepositions, deserve our notice. Chapter v, § 18 we find ἀποχωρῶσι τοὺς λίθους. The first example I find of an accusative after this verb is in the scholia to Euripides's *Phoenissae*, 105. Two lines farther on ἀποχωρίζουσι is found, and ἀποχωροῦσι might easily be emended, but Dindorf has remarked on the transitive use of χωρεῖν in this sense in late Greek. Perhaps this accusative (v, 15) is better explained as the limit of motion, but one would be puzzled to parallel that from *Xenophon*.

For ἀφίστανται τὸν ἥλιον, III, 3, Dindorf, following Schaefer compares Anab. II, 5, 7, a well-known sentence: τὸν γὰρ θεῶν πόλεμον οὐκ οἶδα οὐτ' ἀπὸ ποίου ἂν τάχους φεύγων τις ἀπορύγοι, . . . ἀποδραίη, . . . ἀποστειή. But surely the Greek usage did not demand the repetition of a noun in another case because the third verb in such a series did not govern the accusative. So our construction, τὸν ἥλιον, is unusual in *Xenophon*.

The use of ἀπό in such expressions as IV, 4, γνωρίζουσαι ἀπὸ τοῦ θυμοῦ, ἀπὸ τῆς κεφαλῆς, ἀπὸ τῶν ὀμμάτων κτλ, is not *Xenophontic*, Compare x, 12, τὴν κίνησιν ἀπὸ τῆς κεφαλῆς, instead of the simple genitive.

Peculiar also is the use of διὰ with the genitive. III, 5, δια-

τρέχουσι διὰ τοῦ ἵχνους, tho VII, 6 we have διατρέχειν τὰ ἵχνη, which is obviously the normal construction. Compare with this IV, 3, πρυίτωσαν διὰ τοῦ ἵχνους, and VI, 22, διάπτωσι διὰ τοῦ ἵχνους, and strangest of all, X, 16, ἀφίκου' ἂν διὰ τῆς ῥάβδου. We have an example of this in St. Matt. VIII, 28—παρελθεῖν διὰ τῆς ὁδοῦ, but it is not classic usage, and by no means parallel to διὰ τῶν ὁρέων, διὰ τῶν τάξεων and the like.

Μετά is used eight times, σύν but once, except in composition. One use of μετά is unquestionably not Xenophontic. XI, 3, the the wild beasts descending to the plain by night are caught μετὰ ἵππων καὶ ὄπλων.

The preposition is sometimes irregularly omitted, as IV, 9, εἰς τὰ ὄρη πολλάκις, τὰ δὲ ἔργα ἤττον. Cf. V, 15, τοὺς λειμῶνας, τὰς νάπας.

In connection with these may be noticed V, 27, ἅμα τούτοις = "besides this reason." VIII, 1, ἔξω πολὺν χρόνον seems clearly corrupt, as ἔξω cannot be naturally joined with δῆλα. Another particle to be noticed is ὅτε in ὅτε μὲν, and ὅτε δέ. Never used in the larger works of Xenophon, it is found in this treatise four times, V, 8 and 20; IX, 8 and 20.

In IV, 1, τὰ μεγέθη μεταξύ μακρῶν καὶ βραχέων, we notice that Xenophon regularly uses the singular of μέγεθος, and that μεταξύ can hardly be found in Xenophon used to denote what is between two qualities, as here, "long, short, *between* these." Compare also V, 8, ἄποθεν πολὺ, μικρόν, μεταξύ τούτων, "far away, near, *between* these."

Another peculiarity is the omission of the reflexive pronoun, especially with ρίπτειν and its compounds. V, 4, χαίροντες γὰρ τῷ φέγγει ἐπαναρριπτοῦντες μακρὰ διαιροῦσιν ἀντιπαίζοντες, where we expect αὐτούς with both διαιροῦσιν and ἐπαναρριπτοῦντες. Cf. V, 8, ὅτε δὲ καὶ ἐν τῇ θαλάττῃ διαρριπτῶν. Also VI, 22, ἐπιρριπτούσα, and IX, 20, ριπτούσι. Where Theognis speaks of poverty he says (175):

ἦν δὲ χορὴ φεύγοντα καὶ ἐς μεγακήτεα πόντον  
ρίπτειν καὶ πετρῶν, Κύρνε, κατ' ἡλιβάτων.

Two similar examples of the use of ρίπτω are found in Euripides, and one in Menander, but I have met with none in Xenophon's unquestioned works, nor in other classic prose.

We find in this treatise, moreover, an unusual number of periphrastic expressions, specially with ἔχειν. μηδὲν ὦν ἡ γῆ ἀνίσιν (VI, 25) is not unlike πάντα ὅσα ὦραι φύουσι (Anab. I, 4, 10), but x, 23, ὦν ἂν ὦσιν ἄμφω as equal to "both the parents" of the wild beast, is not so natural. Many periphrases with ἔχειν are found in all of Xenophon's works. They are not uncommon also in Isocrates, as in his Panegyricus, § 67, we find ἔστι γὰρ ἀρχικώτατα καὶ μεγίστας δυναστείας ἔχοντα. The rhetorical argument for the construction is quite lacking, however, in sentences like IV, 1, of our tract, πρῶτον μὲν οὖν χρὴ εἶναι μεγάλας εἶτα ἐχούσας τὰς κεφαλὰς ἐλαφρίας κτλ. Cf. III, 3, ἀσύντακτα ἔχουσαι τὰ σώματα. Stranger still is IV, 8, αἱ μὲν οὖν πυρραὶ ἔχουσαι ἔστωσαν λευκὴν τρίχα κτλ, and VI, 1, οἱ δὲ ἰμάντες [ἔστωσαν] ἔχοντες ἀγκύλας κτλ. Most awkward of all, however, is the beginning of VI, 5, τὴν δὲ στολὴν ὁ ἀρκυωρὸς ἐξίτω ἔχων ἐπὶ θήραν μὴ ἔχουσαν βάρος, where the ἔχουσαν so near θήραν, and far from στολὴν, is a clumsiness which we can scarcely impute to Xenophon, especially as the same short sentence has another case of that participle. I can give parallel examples only from later Greek, as Pausanias v. 18, ἀνὴρ τῇ μὲν δεξιᾷ κύλικα τῇ δὲ ἔχων ἐστὶν ὄρμον.

Another peculiarity of this opusculum in its present form is the use of the infinitive. Perhaps εἶναι in IX, 1, ἐπὶ δὲ τοὺς νεβρούς καὶ τὰς ἐλάφους κύνας εἶναι Ἰνδικάς, will serve as an example. Compare κεκτῆσθαι, x, 1. It is evident that these are not exactly like Περὶ Ἰππικῆς III, 7, πείραν λαμβάνειν, where the infinitive is in apposition with the λαμβάνειν contained in ληπτέον of the preceding clause. At the beginning of chapters IX and x the subject is changed, and after the break it is not a mere matter of course to carry on the force of the δεῖ in VIII, 8. In v, 15 also we have this infinitive λαμβάνειν without any word on which to depend. No χρὴ or δεῖ has been used in the whole chapter; and that this is not the imperative use of the infinitive is shown by the accusative of the participle ὑπάγοντα, which must agree with the subject of λαμβάνειν. This example in v, 15 is the first in the work. Before this the imperative and the infinitive with χρὴ are used. Thus in chapter IV the imperative is used nine times; χρὴ twice;

ἄμειρόν ἐστι once, and ἀγαθόν ἐστι once. After v, 15 the next is ἀπέχεσθαι, v, 34, which, if it were alone, might be taken as used for the imperative. vi, 3, ἄγειν may be taken to depend on the *χοή* in § 2. So also in § 4. But vi, 11, we have τὸν δὲ *κυνηγέτην ἐξίέναι* after twelve imperatives. This infinitive is constant thenceforward to the end of chapter x. Chapter xi is brief, and xii and xiii do not need it or have it. This infinitive must depend on the idea of advice stated, ii, 2, *ὅσα δὲ καὶ οἷα δεῖ παρεσκευασμένον ἐλθεῖν ἐπ' αὐτὸ φράσω καὶ αὐτὰ καὶ τὴν ἐπιστήμην ἐκάστου ἵνα προειδῶς ἐγγχειρῇ τῷ ἔργῳ*. But it is more than seven pages after this that the first infinitive is found which depends on this introductory sentence.

If some of these peculiarities seem slight, and the argument to be founded on them weak, I would call attention to the cumulative force when several of these unusual constructions are found in one passage.

For myself, then, I am convinced that Xenophon did not write this treatise in the form in which we have it. A comparison, however, of the passages in which the most marked peculiarities to which I have referred occur, shows that most of the solecisms and difficulties are contained in certain sections and chapters which may be omitted without interfering with the symmetry of the work; and further, such omission will remove certain difficulties in what remains.

The results of my investigation are as follows:

Xenophon began with i, 18. The long list of heroes who excelled in the chase, found in the proëmium, is not so much in the style of Xenophon as of the later rhetoricians; and, as Mure remarks, it is absurd to preface with so much pomp a tract mainly devoted in its present form to the pursuit of *hares*, which were not the game of Hercules and Theseus; ἀναγορευθῆναι for ἀναρρηθῆναι (i, 14) is not Attic; and the style in general of these first seventeen sections is not that of the *Memorabilia*, nor of the *Cyropaedia*. To begin with ἐγὼ μὲν οὖν (i, 18) seems at first abrupt, but is not unlike the beginning of the *Revenues of Athens*, ἐγὼ μὲν τοῦτο κτλ.; nor the introduction to the *Hipparchicus*, Πρώτων μὲν θύοντα χοή κτλ.



Moreover, according to Schneider the Breslau manuscript omits the οὖν of the ἐγὼ μὲν οὖν, and until within the last century the editions began the second chapter with what is now § 18 of the first chapter.

To the close of II, 8, Xenophon writes of nets and their props. Then follows a long interpolation, out of connection here and containing many deviations from Xenophon's style, to VI, 7, where the dropped thread is again taken up and directions given for fixing the props for the nets. In these interpolated chapters are found the most unusual cases of asyndeta, the most remarkable periphrases (as VI, 5), and the greatest license in the use of prepositions.

From VI, 7, our author tells how the hunt is to be begun. The infinitive in that section can now, assuming this long interpolation, be easily made to depend on ὅσα δὲ καὶ οἷα δεῖ . . . φράσω of II, 2. After VI, 16, there is an interpolation of six sections to the beginning of § 23 which resumes the narrative, and the close of chapter VI brings the hunter to his home after the chase of the hare.

Chapter VII is devoted to the care of dogs and their breeding. ἀλλὰ διαλείπειν . . . ἡμέρας, in § 2, §§ 5 and 8, and τὰ εἶδη in § 7, I consider interpolations.

Chapter VIII treats of tracking hares on the snow. Part of § 1, εἰ δ' ἐνέσται . . . ἀφανίζει, may be from a later hand.

Chapter IX, on hunting deer and fawns, has interpolated §§ 8-10, 13-16, 19-20. In §§ 8 and 20 we find the use of ὅτε δέ, which is unknown to the other works of Xenophon, and the reflexive use of ῥίπτειν.

In chapter X, on the wild boar, I hold §§ 4-18, and χρηστέον . . . πάσχοι in § 22, to be interpolated.

Chapter XI treats of hunting panthers, lynxes, etc., which were not at all in the line of Xenophon, who always writes from his own experiences. Moreover, the second paragraph speaks of poisoning water and food for the wild beasts, a procedure far from the sportsmanlike spirit of our author. In the third section, also, is the late use of μετά, of which I have previously spoken; and it is worth mentioning, perhaps, that μετά is found in the whole treatise eight times, but seven of

the eight times in passages rejected by me on other grounds. *σύν* is used but once (vi, 16, *σὺν ταῖς οὐραῖς*) out of composition, and that in a passage which I hold to belong to the original work. It is known that Xenophon used *μετά* less, and *σύν* more than his contemporaries and later writers.

Chapter xii may well be genuine as far as § 17, where the original ends, ending as it began with the praise of *Παιδεία*. The eighteenth section contains a direct reference to the proëmium than which, as Dindorf says, the epilogus is no better.

This scheme attributes to Xenophon less than half of the treatise before us; but it removes or explains a much larger proportion of the difficulties and solecisms, while what is left is in a condition to receive emendations which the wretched state of the MSS. renders necessary.

This theory relieves Xenophon of the responsibility for the following statements: that hares do not see well because they rush past everything with such rapidity that their eyes have no practice in examining objects carefully, and because their vision is injured by so much sleep (v, 26, 27); that their tails are too short to be of much use to them as rudders in running, but they make use of their ears, dropping them to the ground and bracing themselves upon them when they turn quickly to avoid the hounds (v, 32); that the breath of the wild boar is so hot as to scorch the hair of the dogs which approach him; and that a hair laid upon his tusk immediately after his death will shrivel up (x, 17). These statements, which savor of Aelian and the later writers, are all in rejected passages. My theory also relieves Xenophon of the responsibility for a few stupid puns and unnatural rhetorical clauses. Compare v, 17, *ξέουσι γὰρ μάλιστα μὲν τὰ ἀνάντη ἢ τὰ ὀμαλά, τὰ δὲ ἀνόμωια ἀνομοίως* (uneven places *unevenly*, i. e. less than up hill, more than down hill), *τὰ δὲ κατάντη ἡκιστα*. Here *ἀνομοίως* is used, obviously introduced solely for the sake of the Paronomasia. Compare vi, 20, where the hunter *τοῦνομα μεταβάλλοντα* (literally *changing* the name, where he means calling the name of each in succession) *ἐκάστης τῆς κυνός*, is to shout, making the sound of his voice *ὄζό, βαρύ, μικρόν, μέγα*. Of what advantage

it would be to give a *little* call, when the hounds are supposed to be at a distance, we are not informed. But it would take us too long to consider every example of slovenliness or stupidity of thought and construction in the work as we have it. The same portions of the work, then, which contain statements and thoughts which we are not ready to ascribe to Xenophon, also contain the unusual constructions to which I have called attention. The theory propounded in this paper claims attention on the ground that it so largely removes what is unlike to or unworthy of Xenophon, and still leaves a framework far more symmetrical than the traditional form, with a beginning, a well-arranged middle, and an end.

From the external evidence in its favor, as well as from certain internal marks of style, I am inclined to believe that the *Cynegeticus* is from the hand of Xenophon. If that be still disputed, I claim that the evidence here brought forward for an earlier and a later hand in its composition is still unshaken.

The interpolator generally contented himself with inserting chapters and paragraphs. Only occasionally are we obliged to cut out from a sentence which seems Xenophontic a word or two which, as is evident from other passages, proceeded from the second hand. Only once is it necessary to the construction of the sentence to supply anything from an interpolated section. In VI, 7, ὁ ἄρκυωρός, the subject of ἐπιβαλλέτω, must have been dropped by the diasceuast when he wrote §§ 5 and 6.

Who this interpolator was, it is perhaps idle now to inquire. We only know that he must have lived not later than the beginning of our era; for Arrian early in the second century after Christ seems to have accepted this tract in its present form as the work of Xenophon.

## VI.—*Elision, especially in Greek.*

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I propose, in this paper, to discuss the nature of elision in Greek; and, in so doing, I shall first examine the views of others, and then present my own.

Corssen, Westphal, Heinrich Ahrens, and many others, hold that elided vowels were not entirely suppressed, but merely diminished, and one argument they employ is that the Greek name itself, *συναλοιφή* or *σύγκρισις*, does not signify total expulsion, but implies that the vowels were united in a rapid pronunciation, and did not suffer what was called *ἐκθλιψις*, or expulsion. To this I reply: 1. That the ancient writers are not always to be interpreted literally; for, as one vowel, or rather one syllable, appeared to result from a combination of two, and the elided vowels *sometimes* were slightly sounded (a point to be explained hereafter), there was no reason why they should not, in a loose way, designate the process by the word *συναλοιφή*, or *σύγκρισις*, which does not necessarily mean anything more than "conjunction"; and besides, already at a tolerably early day they employed the term *ἐκθλιψις* to denote elision. Even modern writers are not exempt from much more inaccurate applications of terms than even *συναλοιφή* in the sense of elision, to say nothing of the other words. As, for instance, the German grammarians call final *m* and *n* in French a "Nachklang," or "after-sound," as if they were pronounced *after* the accompanying vowel, while every one knows that they merely give the entire vowel a nasal tone. Many illustrations of this could be cited, but this one must suffice.

2. Moreover, when the ancient grammarians speak of the suppression of hiatus, they frequently fail to distinguish between the various processes, or else between the words that denote them; and in the very passage cited by Corssen, elision is confounded with crasis. The passage is: "Ἐστὶ δὲ

συναλοιφή δύο φωνηέντων διηρημένων εἰς μίαν συλλαβὴν ἔρωσις, οἷον τὸ ὄνομα. τοῦνομα. If the metrician had not added his example, the inference would have been that συναλοιφή was always the combination of two vowels into one, whilst the example he gave shows that he had only crasis in mind when he cast his definition; and yet Corssen wishes to apply the definition to elision.

But as it is the custom of many now-a-days to dismiss the question of elision with the statement that Ahrens has shown it to have been only a partial expulsion, and as Ahrens has given about all the arguments for that view, I proceed to take up his arguments and examine them one by one. In the *first* place, Ahrens says that if elision is total, the letter immediately preceding the elided vowel closes the word as thus modified, and he calls attention to the fact that we then find not a few unpronounceable combinations, as ἔσθλ', σέμν', etc., and others which the Greeks would not tolerate, as νύκτ', πεῖθ', etc. But if, as he asserts, elision does combine two vowels into one, then the two words become one; and why then may we not be allowed to combine the words after *expelling* one of the vowels? And this is exactly what happens, except in some instances about which I shall presently speak. *Secondly*, Ahrens says that ἀλγε' ἔθηκεν, ἀντί' ἐμεῖο, and similar combinations, would still have a "hiatus offensionem, *quam non inesse constat*." How does he know? The Greeks did not suppress two syllables, by elision, because this would have maimed the word too severely, so there was nothing left them but to tolerate the new hiatus, as custom required them in poetry to remove the original hiatus. And besides, does Ahrens's diminution-theory remove his own difficulty? It seems to me to increase it, for who will pronounce ἀλγεᾶ ἔθηκεν for us (pronouncing the final α of ἀλγεα, yet making it of inappreciable length)? And in ἀντί' ἐμεῖο there is surely a less offensive hiatus than in ἀντίᾶ ἐμεῖο. Moreover, it is a well-known fact that languages, in removing one hiatus, sometimes create another no less offensive; as, in Sanskrit vanê âsît is resolved into vanai âsît, and the i being elided, we have vana âsît, where the hiatus appears even worse than at first (Bopp,

Crit. Skt. Gram. § 38). But after all, I am willing to admit that there is nothing offensive in the remaining condition of things when elision has been made; for the two words are pronounced continuously, and the vocal muscles do not have to arrest themselves and then renew the exertion as they do in case of real hiatus.

*Thirdly*, Ahrens draws his conclusion from the scholia on EURIP. Or. 279:

Ἐκ κυμάτων γὰρ αὐξίς αὐτὴ γαλήν' ὄρω.

The scholiasts on this passage (and also on ARISTOPH. *Frogs*, 304—not cited by Ahrens) say that Hegelochus, getting out of breath, passed rapidly over the elision, and the spectators thought he said γαλήν ὄρω, which circumstance gave Aristophanes (*Frogs*, 304), Strattis (*Anthroporhæstes*), Sannyrion (*Danaë*), and others an opportunity to amuse their audience at the expense of Euripides and his great actor. But, as I shall show hereafter, when occasion demanded, the Greeks did sometimes slightly sound elided vowels, and one of the most natural places to do this is where ambiguity might result from *total* elision; and the statements of the scholiasts show that what Hegelochus did was nothing unusual under ordinary circumstances; and as to his breath failing him, that seems to be one of the many inventions of the very fertile minds of the scholiasts. If he did not have enough breath to utter a “diminished” vowel, how could he add ὄρω so as to be heard by thirty thousand people? And if he stopped to take breath, then he did *not* pass rapidly over the synaloephe. The fact may be that, getting out of breath he lowered his voice, thus making γαλήν out of γαλήν', and then took a breath and added ὄρω, which would complete the transformation, since the elision should not be complete where any pause is made. This, however, is a mere conjecture, and is not necessary to the explanation of the matter. The mistake on the part of the spectators was anyhow quite natural, because ὄραν γαληνά was a forced and unnatural expression.

*Fourthly*, Ahrens observes that συναλοιφή does not denote *expulsion*, and that elision takes place before a pause, and at

the end of a verse, and even between two speakers. I have already spoken of the meaning of *συναλοιφή*; but here I shall discuss the subject more at length. That the word *ἐκθλιψις* was employed to designate elision is well known, and the only question is how early it was so used. I shall not attempt, however, to settle this question, for it is clear that it was so used sufficiently early to show that whatever it denoted had an existence in classic times. Draco enumerates seven kinds of synaloephe, among which he places *ἐκθλιψις*, which he defines thus: *καὶ ἐκθλιψις μὲν ἐστὶ ἐνὸς φωνήεντος ἀπώλεια*, and illustrates by *ὑπ' ἐμοῦ* for *ὑπὸ ἐμοῦ*, although he defines synaloephe itself thus: *Συναλοιφή δὲ ἡ τοῦ προεφημένου καὶ ἐντελοῦς σύμπτυξις τε καὶ ἔνωσις*: a definition which shows how careless the ancient grammarians could be in their statements; and, in my opinion, they had crasis also in mind, or even exclusively in mind, when they appear to apply the word *συναλοιφή* to elision, except that when employing it as a *generic* term, they sometimes apply it specifically to elision, just as one may call a temporal sentence a *relative* sentence. Here is another statement of the subject: *Συναλοιφή ἐστὶ δύο συλλαβῶν κατὰ φωνήεντα ἔνωσις καταβολῇ τόνων. γίγνεται δὲ κατὰ τρόπους ἑπτὰ. ἀπλοῦς μὲν τρεῖς κατὰ ἐκθλίψιν, ἐπ' ἐμέ ἀντὶ τοῦ ἐπὶ ἐμέ· κατὰ κῤῥᾱσιν, τὰμὰ ἀντὶ τοῦ τὰ ἐμά· κατὰ συναίρεσιν, νηρῆδες ἀντὶ τοῦ νηρηῖδες. συνδέτους δὲ τέσσαρας, κατὰ ἐκθλίψιν καὶ συναίρεσιν, ἐμοῦ ποδὺν εἰ ἀντὶ τοῦ ἐμοὶ ὑποδύνει· κατὰ κῤῥᾱσιν καὶ συναίρεσιν, ὄπλοος ἀντὶ τοῦ ὁ αἰδόλος· κατὰ ἐκθλίψιν καὶ κῤῥᾱσιν, κ' ἄγ' ἀντὶ τοῦ καὶ ἐγώ· κατὰ ἐκθλίψιν καὶ κῤῥᾱσιν καὶ ἀφαίρεσιν, ἐν τᾷθιωπῖα ἀντὶ τοῦ ἐν τη Αἰθιοπῖα.* Here it is evident that the grammarian by *ἐκθλιψις* means *total expulsion*, for in *ἐπ' ἐμέ* he says we have *ἐκθλιψις*, and in *κ' ἄγ'* both *ἐκθλιψις* and *κῤῥᾱσις*; that is, the *ι* in *καὶ* being elided, we have *κα' ἐγώ* which then suffers *κῤῥᾱσις*; and no one will deny that this *ι* was totally suppressed. Hephaestion therefore rightly distinguishes between *συνεκφωνήσεις*, by which *πλέων* (Il. A. 183) is reduced to one syllable, and synaloephe (generic, including elision), by which a vowel is rejected, as *ὦχ' ἐκατόγχειρον* (Il. A. 402), *θῖν' ἐφ' ἄλός* (Il. A. 350). But these two processes would have been the same, if elision had only been a diminution. And the scholiast on this passage does not err when he says: *Διαφέρει δὲ συναλοιφή συνεκφωνήσεως,*

ἡγουν συνιζήσεως. ἡ μὲν γὰρ συναλοιφὴ ὡς γράφεται οὕτω καὶ ἐκφωνεῖται· ἡ δὲ συνιζήσις οὐχ ὡς γράφεται ἐκφωνεῖται, ἀλλ' ἐν τῇ βραίνειν τὰς δύο συλλαβὰς ὁμοῦ ὑπὲρ τῆς τοῦ μέτρου θραπέας συνεκφωνεῖ· διὸ καὶ συνιζήσις λέγεται κτέ.

§ 2. So far my arguments have been negative. I shall now present my own views, and support them with a brief discussion of the evidence in their favor.

In prose, as is well known, the Greeks tolerated hiatus, except that some rhetoricians tried to banish it in artificial compositions, an illustration of which we have in the orations of Isocrates. But then, if they chose, they could elide. Hence we draw the important conclusion that the Greeks *could elide or not elide, as suited their convenience*. One might assume this as a matter of course, but Cicero, while testifying to this peculiarity of Greek, denies that the same privilege exists in Latin. He says (Or. 44, 152): "Sed Graeci viderint: nobis ne si cupiamus quidem distrahere voces conceditur," etc. But in poetry the Greeks avoided hiatus for the most part, and in tragic trimeters banished it entirely, except (apparently) after *τι*, as Aesch. Sup. 306, *τι οὖν*; Soph. Philoct. 917, *τι εἴπας*; and rarely after *εἰ* in close combinations. But frequently it was difficult to prevent a word which ended with a vowel from preceding one beginning with a vowel, even when there was a pause between them. In that case they did not totally expel the vowel, nor even necessarily reduce it to inappreciable quantity. Whenever this happened the elision was indicated as if total, while in recitation the elided vowel was either pronounced in full or merely diminished, just as the sense required or permitted. Another instance of partial, or apparent elision is where an *emphatic monosyllable* apparently loses its vowel, as Eurip. Tro. 945: *οὐ σ', ἀλλ' ἐμάντην τοῦπι τῷδ' ἐρήσομαι*. So Alcest. 984. Also where the sense would be obscured, as Herc. Fur. 972: *ἄλλος ἄλλος, ἐς πέπλους ὁ μὲν μητρός κτέ*. Cf. Soph. Elect. 1499, Eurip. Ion 3, etc., etc. And thus it came about that if for any reason they desired it, *they felt themselves at liberty merely to diminish a vowel, even when there was nothing but metrical considerations to prevent its total expulsion*. This fact is of special importance in determining certain effects of elision



in the construction of verses—a subject on which I propose to present a paper at some future time.

But that vowels could be, and actually were, entirely expelled by elision, is shown by the following considerations :

1. When the second word begins with an aspirated vowel, then the aspirate affects the final consonant of the first word, if it can be aspirated without changing its character, as *νόχῳ* ὁλην, ἐφ' ἡμῖν, θώραχ' ὅπως, which seems to me impossible if the elided vowel was pronounced ever so little, for then it would have separated the consonant from the aspirate. This, it is true, does not happen in Herodotus ; but then in H. it does not happen in *compound words*, like ἀπίνμη, where all admit total elision.

2. If the ultima has the accent, it goes back to the next syllable when elision takes place, and enclitics retain their accent when elision takes place before them. This would hardly have been the case if the elided syllable had only been diminished, for the Greek accent was merely an elevation of the voice, and not stress. (This recession of the accent from an elided ultima is found in some of the examples used by Ahrens to prove that the vowel was *not* entirely suppressed, as ἔσθλ'. σέμν'.) We have in the Greek language itself an instance of the accent *remaining* on a merely diminished vowel (or at least not seeking another syllable), and that is in aphaeresis, as ἐκείνῳ ὄωκεν or ἐκείνῳ ἔωκεν. Thiersch ridicules such accents, calling them “*accentus ἀεποβατοῦντας*,” but if he had put on his phrontistic spectacles he would have detected a κρεμάθρα on which they ride ; in other words, the omission of the vowel in this case only indicated its diminution to inappreciable quantity, while the accent still remained on it, just as in Sanskrit we find an accent (the *svarita*) partly on *v* and *j*, although these not only fail to make syllables themselves, but even do not lengthen a short syllable, as in *svar*, *kva*, *nadjas* (Bopp, Crit. Gram. § 30, 1); and similarly even in Greek where an accented vowel suffers synizesis, as in Αἰνέας (Rhes. 85), ἀριστέων (Alcest. 921), τευχέων (Androm. 167), ὀπτέων (Tro. 1177). So Οἰλέως, Ἀχιλλέως, and in Hom. Od. Αἰγυπτίους, with hundreds of instances everywhere. In

all these the accented vowels become virtual consonants. This view is further sustained by the fact that when the first syllable of a word is entirely lost, the accent on it is removed to the next syllable, as in the Homeric βάλλε for ἐβάλλε, where no vowel precedes. Corssen, indeed, denies that such forms have lost the augment, but G. Curtius more successfully maintains that they have. But as it is important to establish the position that in aphaeresis the vowel was thus diminished and yet retained the accent, I must not leave unnoticed the fact that Thiersch, Buttmann, and others deny the existence of aphaeresis, and assert that all the apparent instances of it really belong to crasis. This view, though, cannot stand in the face of the following facts:

*First*, such combinations as δύναμαι ἔγω, which are frequently found in MSS., and are not wanting in inscriptions, would have to be written δυναμάγω, with omission of ι and contraction of α with ε. *Secondly*, when the word suffering aphaeresis begins with an *aspirated* vowel, the consonant beginning the syllable preceding would become exposed to the aspirate as in θοιμάτιον for τὸ ἱμάτιον, θήμέρα for τῇ ἡμέρᾳ, θάτέρα for τῇ ἐτέρᾳ (once ἁτέρα), whilst in reality we find such examples as αὕτη ἔτερα (ARISTOPH. LYS. 736) for αὕτη ἐτέρα, which, by *crasis*, would become αὐθήτερα (αὐθάτερα?). I am willing, indeed, to concede that *some* instances of aphaeresis, as found in the texts, are to be written otherwise, as χή ᾿γχουσα (LYS. 48), which ought to be written χῆγχουσα, for the article loves crasis, and I suspect that the usual way of writing these words is due to the fact that the double crasis seemed rather bold, and obscured the words. Felton's ᾱ λαβεῖν (CLOUDS 1268) with long ᾱ is certainly wrong. *Thirdly*, aphaeresis sometimes takes place after a long pause where crasis is impossible, as CLOUDS 1354: ἐγὼ φράσω ᾿πειδὴ κτέ.; PHILOCT. 591: λέγω ᾿πὶ τοῦτον κτέ.; RHESUS 157: ἤξω ᾿πὶ τούτοις κτέ.; IPH. in AUL. 719: μέλλω ᾿πὶ ταύτῃ κτέ., etc., etc. It is sometimes regarded as taking place at the beginning of a verse, but a careful examination of all the Greek dramatic poetry convinces me that this may have been a mere omission of the augment of verbs (which frequently occurs in ῥήσεις ἀγγελικαί), although

in the great majority of cases the preceding verse ends with a vowel. This vowel is sometimes short, as in Oed. Colon. 1605-6, and sometimes we find a consonant, as Oed. Rex 1248-49. I am not so sure, however, that aphaeresis may not take place after a short vowel; and I shall presently have occasion to cite a case of similar aphaeresis in Latin. But to return:

3. Diphthongs are frequently elided, and especially in the verbal ending *-ai*. Now can a whole diphthong be reduced to inappreciable quantity? It is difficult to reduce a diphthong even to a short syllable; nor is there any reason why the first vowel should be diminished unless the second is entirely removed, so that those who assert that elision is mere diminution are compelled to affirm that *ι* is dropped entirely and *α* diminished; but if *ι* in a diphthong can be dropped entirely, why cannot any elidable vowel be thus dropped, as *α* in ἄλγεια ἔθηκεν, γαληνὰ ὄρω? One might reply that the *ι* becomes a sort of consonant or semi-vowel, like *y*; and I believe that this is what actually happens when a diphthong is *shortened*, as in οὐκ ἔσει οὐ τρογών, where *ι* = *y*, and in αἰετοῦ ἐν νεφέλῃσι, and ἴζειν ἐμεῖο, where *υ* = *w*, since *υ* is never elided, the well-known exception in a quoted oracle in Herodotus being only apparent. But if this is what becomes of the second vowel in case of *elision* of a diphthong, there is no reason at all for the shortening of the first vowel, as there is no longer hiatus. In such instances, therefore, as κοιμᾶσθ' ἐν πόλει (for κοιμᾶσθαι), κολάσ' ἐξεστι (for κολάσαι), δοῦν' ἐνεστι (for δοῦναι), γῆμ' ἐπήμε (for γῆμαι), δέομ' ἐγώ (for δέομαι), necessarily the second vowel, and in fact the first, too, was elided, unless for some special reason it was desirable to make the first audible.

4. Epicharmus, as quoted by Athenaeus (viii, p. 338, d; see Ahrens, de Crasi et Aphaer. p. 2) plays upon γ' ἔφανος and γέφανος, from which it appears that the *ε* in γέ was suppressed. Aristophanes (Clouds 1273) appears also to play upon ἀπ' ὄνον and ἀπὸ νοῦ. Further, DION. HAL. (De Comp. Verb. c. 11) calls κτυπεῖτ' (for κτυπεῖτε) "two syllables." I am not disposed to make much of this, as an inappreciable vowel might be omitted in counting syllables metrically.

5. The words ὅταν, ὁπότε, γάρ, γοῦν, etc., for ὅτε ἄν, ὁπότε ἄν, γε ἄν, γε οὐν, etc., show that the vowel was entirely suppressed; and after they had been a long time in use, the combinations began to be regarded as single words. This might happen, it is true, merely from long juxtaposition, as we have in Latin, (where elision does not appear to have been total) *tantōpere*, *magnōpere*, for *tantō ὅpere*, *magnō ὅpere*. But this is much rarer than in Greek, and we have in Latin two vowels united into a diphthong, as in *neuter*, *neutiquam*, *deinde*, etc.

6. Finally, if elision had been only a diminution of the vowel, as in Latin, it would not have been subject to so strict limitations, but would have been as universal as it was in Latin. But, as is well known, elision in Greek was strictly forbidden under certain circumstances. For instance, α, ι, and ο in monosyllables were not elided (except α in σά); and υ was never elided at all. The seeming exception in Herodotus (VIII, 220) ἄστ' ἐρικυδέες should most probably be ἄστυ ῥικυδέες (a sort of aphaeresis after a short vowel), or perhaps the oracular poet or priest was at his wit's end for a verse, and admitted *diminution* where *expulsion* was not tolerated. When υ closes a diphthong, it does, indeed, seem to be elided; but in that case, as I have already said, it was probably pronounced somewhat like w, just as ô in Sanskrit before a vowel becomes av, where υ was, no doubt, pronounced like w. Further, ὅτε and περὶ do not suffer elision, possibly because they would then sound like ὅτε (with its ε elided) and περ, which would not be the case if their vowels were sounded ever so little. Some words, however, with *long vowels*, did suffer a partial elision; but this is one of those exceptions that prove a rule; for if *all* elisions were only partial, then μὴ οὐ (as one syllable) should be written μ' οὐ, and would be an ordinary case of elision. Nor is it crasis, for then it would be μῶ (cf. μῶν for μὴ οὐν); and moreover the combination may occur when a slight pause intervenes, as Oed. Tyr. 944: τέθνηκεν· εἰ δὲ μὴ, αὐτὸς ἀξιῶ θανεῖν, and also where crasis would utterly obscure the sense, as Trach. 85: ἥνικ' ἡ σεσῶσμεθα | κείρου βίον σώσαντος, ἡ οἰχόμεσθ' ἄμα. The contraction of μὴ οὐ into μῶ would itself be rather obscure; but if so in

writing, then certainly also in speaking; and that contractions of the sort, when made in speaking, were also indicated in writing, is shown by *χοῦν* for *καὶ ὁ ἐν*, EURIP. Heracl. 173; *θῶπλ' ἀπιέναι* for *τὰ ὅπλα ἀπιέναι*, Birds 449; and even *καὶ* for *καὶ αἱ*, Lysist. 1105. We have, however, an instance of crasis not indicated in writing, in EURIP. Orest. 599: *εἰ μὴ ὁ κελεύσας ῥύσεταιί με μὴ θανεῖν*, unless with Witzschel and others we omit *ὁ*, or admit synizesis of a long vowel with a short one, resulting in a long syllable.

Further instances of non-elidable vowels are found in the genitive ending *-οιο, -αιο*, and to a great extent in the dative ending *-ι*; and third singular endings in *-ε* are not elided before *ἄν*, unless we admit *εἴχ' ἄν μέτρον* (Ion 354); for *συνέσχ' ἄν* (Alcest. 901) is an impossible conjecture, and *ἐλάνθαν' ἄν* (SOPH. Elect. 914), though desirable as to the sense, is not the MSS. reading. Other instances of forbidden elision might be cited. All this proves conclusively that elision was recognized as having power to remove a vowel entirely; for, otherwise, there was no reason why elision might not have been as general as it was in Latin, where the restrictions, as far as they exist, merely have reference to too great a mutilation of the word, and were a refinement of artificial writers. The vowels which could not be elided entirely in Greek, were, for the most part, not even allowed to suffer diminution to inappreciable quantity (Latin elision), because this was a modified form of ordinary elision, and was *written* as elision, i. e. the vowel was omitted in writing, except in those few cases where the elision was *never* total, as *μὴ οὐ*. An investigation of these latter cases would lead to a discussion of synizesis and synaeresis, which is foreign to the object of this paper.

§ 3. These arguments seem to prove that vowels could be and frequently were entirely expelled by elision. It now remains to be shown that not unfrequently they were, for special reasons, only partially elided; and indeed they sometimes had nearly or quite their full time, although they counted for nothing in the structure of the verse.

In the first place, elision takes place before a strong punc-

tuation, as (Birds 990) οὐκ εἴ θύραζ'; ἐς κόρακας κτέ. EURIP. Androm. 459:

κτείνεις μ'. ἀπόκτειν'· ὡς ἀθώπευτόν γέ σε.

SOPH. Elect. 662:

τάδ' ἐστίν, ὦ ξέν'. αὐτος ἤκασας καλῶς.

Cf. also 671, 1041, 1112, 1470, etc.

I am not disposed to attach much importance to elision at the end of a verse, as in Birds 1716:

χωρεῖ, καλὸν θέαμα· θυμιαμάτων δ'  
αὔραι διαψάιρουσι κτέ.,

and Oed. Col. 1164:

σοὶ φασὶν αὐτὸν ἐς λόγους ἰλθεῖν μολόντ'  
αἰτεῖν ἀπελθεῖν τ' ἀσφαλῶς τῆς δεῦρ' ὁδοῦ:

for I doubt whether this ever happens unless the sense requires the verses to be closely connected together; and that being the case, the two verses can be read continuously as one long verse, and the vowel can be dropped.

Again, elision takes place *between two speakers*, as Birds 846, 1015:

EYEΛΠ. οἴμωζε παρ' ἔμ'. ΠΙΣΘ. ἴθ', ὠγάθ', οἱ πέμπω σ' ἐγώ.

ΠΙΣΘ. μὰ τὸν Δι' οὐ δῆτ'. MET. ἀλλὰ πῶς;

So SOPH. Elect. 1431:

OP. .... εἰσορᾶτε ποῦ  
τὸν ἀνδρ'; ΕΛ. ἐφ' ἡμῖν οὗτος ἐκ προαστίου—.

Ibid. 1502:

OP. ἀλλ' ἔρφ'. ΑΙΓ. ὑψηγοῦ. OP. σοὶ βαδιστεον πάρος.

Elisions of the sort just now mentioned—those at a full stop *not* between two speakers—are comparatively rare; for there was something harsh about them; and although we may use the interrogation point or the period, still the *pause* is really short in most cases. That they were in some measure unpleasant is shown by the fact that Isocrates, who did not tolerate hiatus in his orations, also banishes this sort of elision—a thing which he could do more effectually than the poets, who were somewhat trammelled in the arrangement of their words by

metrical considerations. But elision between two speakers does not appear to have been avoided at all; for, in fact, it was not a real elision. The second actor began to speak just as the first one struck his last syllable. To this it may be objected that the same thing could have happened just as well, if the first speaker closed with a consonant; and this is certainly true. But there would have been nothing to indicate that it was to be so recited, and, as I have already said, verses were so composed that, when written, they looked perfect, which could not be done if the first speaker's final syllable had been disregarded when it was closed by a consonant. We find something analogous to this effort to make the verse appear perfect in the classic French drama, where, without affecting its pronunciation, the mere spelling of a word is sometimes altered, so as to make it *look* like the word with which it rhymes, as *Le Cid*, v. 771, where *voi* (for *vois*) rhymes with *toi*, and 851, where *voi* rhymes with *moi*. Somewhat analogous is also the method of indicating a pause at the end of a piece of music when the last measure is incomplete.

In view of all this it is safe to assert that elision between two speakers was relatively more frequent than at a full stop in a speech of one person. (I say *relatively*, because this sort of elision only has a chance to occur when a verse is divided between two persons.) In fact it was not avoided at all, but sometimes appears even to have been sought, as it gave one actor an opportunity to fall in before the other had entirely finished his last word—a thing to be desired when the dialogue is animated, or for any reason rapid. If any one doubts this let him examine such passages as EURIP. *Orest.* 1598–1612, where in fifteen lines this elision occurs seven times.

These arguments prove conclusively that elision was sometimes only partial, and sometimes even only apparent, the vowel omitted in writing being pronounced in full, but counting for nothing in the structure of the verse.

§ 4. Although it was more especially designed to investigate *Greek* elision in this paper, it will not be irrelevant to append a few remarks on elision in Latin. It is conceded by

nearly all that elision in this language was only partial. Hence it was subject to less strict laws than in Greek, and hiatus is more rarely admitted, it being easier to avoid it. Indeed Cicero (Or. 44, 152), as quoted before, says that the Romans were not allowed to neglect elision even if they desired to; and then finds fault with poets for doing it. But this very fact that poets did sometimes allow it, shows that the law Cicero announces was not without exception, and of course it was no physical necessity, but merely convenience and usage. Yet Cicero's remark shows that in *prose it was practically universal*. Such words as *neuter*, *deinde*, etc., show that elision was not total, at least, in some cases where there was nothing to prevent its being total if it ever was; and those cases where the vowel was entirely lost (*tantopere*, *magnopere*, *animadvertere*, etc.) are mere results of long usage, the vowel having been slightly pronounced at first, just as we say "extrordinary" instead of "extra-ordinary." In *tantopere* and *magnopere* this process was hastened by the identity of the two vowels brought in contact, "tanto-opere," as elision and contraction are more necessary under these circumstances. This is illustrated by the Greek second declension in the genitive plural, which contracted before the existence of the law that a long ultima should prevent the accent from falling on the antepenult; while the same contraction did not happen in the first declension until after this period, the vowels not being so similar; thus *λόγων* became *λόγων*, while *μούσων* remained. Afterwards the long ultima removed the accent, and then they said *λόγων*, *μουσών* (an extant form); and finally *μουσών* contracted into *μουσῶν*. Similarly *nihil* became *nīl*, and *mīhi*, *mī*; but we must not carry the illustrations too far; for phenomena from *within* words, simple or genuinely compound, will not always hold for separate words; and *tantopere* and *magnopere* are not to be regarded as genuine compounds, such as *cogere*, *degere*, in which *crasis* seems to have been employed. (Corssen, by the way, Ausspr. Voc. Beton. II, 889, writes "tantôpere," or possibly his printer did it for him.) And so in *mīhi*, *nīhil*, the process was different from that in *tanto opere*, but they



illustrate the aversion of the vocal organs to a consecutive repetition of a vowel. But of genuine crasis between two words, not combined into a genuine compound, I know of no example in Latin. In fact, elision being only partial, and so being allowable under almost all circumstances, there was no need of crasis; and the nearest approach we have to it is what we find in *degere*, *cogere* (just mentioned), further examples of which are *dēesse* (two syllables), *dēerrare* (three syllables), in which Velius Longus (p. 2227) says the *e* or *ee* was long (by nature), which of course we should expect, as the preposition sometimes formed a syllable to itself. Contractions such as *amatast*, *integratiost*, are not crasis, but a species of aphaeresis, as is shown by Tibullus (1, 9, 53, and 77):

at te qui puerum donis torrūmpĕrĕ's ausus—  
blanditiasne meas aliis tu vĕndĕrĕ's ausus.

The later Roman grammarians speak of elision as if it were a total expulsion of the vowel; but their authority is not of any importance. The name "*elision*," it is true, strictly interpreted, would imply total removal; but the Roman grammarians employed terminology that was adapted to Greek, and sometimes even mistranslated Greek terms. So we now speak, and I have just been speaking of "*elision*" in Latin; and while doing so, I have been trying to show that it is not *elision*, but *diminution*.

But there are good reasons for believing that the particles *-que*, *-ve*, *-ne* lost their vowels entirely through elision; and *-ne* is sometimes written without its vowel even before a consonant; just as *face*, *duce*, *dice* lost their *e*, and even *cave* (being much used) lost its *e* sometimes, as shown by Cicero's well-known remark implying similarity of sound between *caunēas* and *cave ne eas*. The elision of these particles will come up in my next paper.

Briefly, then, to sum up the whole matter:

1. In Greek, elision was the total suppression of a vowel; but it *could* be only the partial suppression, and sometimes was *required* to be only partial, or even merely apparent.

2. In Latin, elision was the partial suppression of a vowel; but in a few special instances it was total.





**DO NOT CIRCULATE**



